English

Original

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THE SUPERSENSITORY ORIGIN OF PAINTING

A GRAMMAR OF VISION

Written in German by Hans Hofmann
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A PICTURE (LIKE ANY OTHER WORK OF ART) IS A SPIRITUAL REALITY AND AS SUCH IT IS AS REAL AND CONCRETE AS PHYSICAL REALITY...

H.H.

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* Diagrams must serve as substitute since nature (to a considerable part the object in this book) cannot be approached in book form.

I

D E F I N I T I O N O F F O R M -

Nature and the artist -

The artist stays above nature -
nature serves him -- but is not allowed to
dominate him--he--not nature
is the master -
Only the man
who stays above the situation
will be the master of the situation.
The imitator falls in the same category as
the slave -
Nature is Janus-Faced --
and so are all the arts
"in cause and effect."

INTRODUCTION -

OBJECT AND ART:

Both the object and the work present Form: two different kinds of Form:

the object offers it in a realistic sense --the work in an esthetical sense.

WHAT IS FORM? Objective form and Esthetic form...

We differentiate between form in a biological sense, which concerns the object, and between form in an esthetic sense, in which the work exists spiritually as a work of art. The first concerns the physical logic of the object--the other is a form which is exclusively created by the mind. The merging of both is documented in all the great works of the old masters -

both must be not confused in the act of creation and never must the Form of the object interfere with the esthetical Form of the work.

Only Matisse, Picasso and Braque, each of them in his own way, and a few others have mastered this mammoth problem.

TWO DIFFERENT KINDS OF FORM

In speaking of things that are manifestly different we often use ambiguous words. The ambiguity is not always apparent in everyday speech. This necessarily leads to confusion in concepts. One such ambiguous expression, and one often used in discussions of art, is the word 'form.' In both art- and lay-circles, the word is usually applied to the description of an object: the object has Form. The word has a more specialized application in the designation of the compositoric content of an art form. Both connotations are basically different. The form of an object designates its shape relative to the realm of reality. The art form of an esthetical work derives from the realm of intellect. The reality - shape, or form of an object - is generally easily understood since it confronts us everywhere in daily life. The form of the work evades general comprehension, since it presupposes a faculty of Empathy, ie., the capacity to project one's feelings into an experience of nature or a medium of expression. This capacity is nowise general, and when present at all, it remains for the most part undeveloped. Real greatness of creative expression is impossible without it.

From this consideration arises the question: can the faculty of empathy be developed? For only on the basis of this supposition is art teachable. The capacity for empathy is a requisite of artistic experiencing; prerequisite to artistic enjoyment generally, and to artistic criticism in particular. This book is an attempt in this direction.

The act of painting.

The act of painting (under consideration in this book) involves a multitude of fundamental implications:

1) the mastery of nature

   a) in a realistic objective sense
   b) in a visual sense
   c) in an interpretative "plastic" sense of both a) and b)--

To dominate nature and to be not dominated by nature... that is the all out problem in creation--and yet not the greatest mastery of any one of the foregoing considerations will produce a work of art without the awareness of the other involvments that dominate the creative process.

The further involvements are:

2) the Knowledge and intuitive mastery of the inherent Laws of the picture plane- (whose nature is a Reality for itself)

3) the intuitive mastery of the inherent Laws of any medium of expression whose nature serves the creative act (as colors or any graphical means, etc.).

4) the subjectivity of the artist whose imagination, intuition and temperament reveals him the master in the independent handling of all implications involved in the process of metamorphosis which is creation.

<u>On this premise this book is written</u>.
Knowledge makes not an artist...it is more often an hindrance for artistic liberation--which appeals to the instinct rather than to reasoning. The creative act is based on the supra-sensitory faculties of the artist ...on his Faculty to feel into the things...<u>which is the Faculty of Empathy.</u>

FORM in the sense of the Pictorial Means

The outcome of every act of form - its artistic result - is dependent upon various factors:

These factors are by their nature:

1) static (in elements of being and of expressive means)

2) dynamic (in enlivenment of being and of expressive means)

3) subjective (in the nature of the artist and in the endowment of his temperament which must be ruled by the composite of his capacities for sensibility and empathy in order to provide a rhythm of creative form.

4) metaphysical (in a content revealing relationships basic to form).

Natural Appearance - Presentation - Effect

If we start from the fact that spatial nature appears other than it objectively is, and that the effect of form no longer has anything in common with its formative elements productive of this effect, we reach the conclusion that every experience is based upon sensory illusion, whether our experience is of nature or of a work of art. Picasso said once: "Art is a lie." Indeed, every artistic effect derivative of a picture is based on illusion, and this in turn is based on supersensitory effects expressed in the relationships of formative means. This observation leads to pertinent conclusions obviously basic to every creative act on a pictorial surface.

We distinguish:
between the space of our optical capacity (visual experience) and between the space of our projection (plastic experience);further between space on the pictorial surface given through expressive means, and the relationships of these expressive means under themselves as well as in relation to the picture surface. From it pictorial space will develop.

The space of our optical capacity is two dimensionally limited. The space of our imaginative projection is boundless. The space of the form elements is two-dimensional. The three-dimensional property of reality is opposed to the span of our optical capacity and to the space of our imaginative projection. The formative space is by nature of the pictorial surface conditioned space, in which our three-dimensional projections are led back and led together into the two-dimensional limitation of our optical capacity. The sum of spatial unity is two-dimensionality, simultaneously realized in color, light and form. Spiritually-uttered space is a relative space based on perception for the interplay of the contrary spatial functions of form and color, and therewith on perception for the total compositoric play of forces. (Rhythm, movement and counter-movement, tone, color, light, harmony, interval tensions, etc., as they correspond to the unbounded variety of life-utterance that is the spiritual departure for every act of form-giving.

Pictorial form is concerned with three things that determine the spiritual develpopment of form:

1) with reality which by our sensory experiences and by our intuitive capacity becomes experience: experience of nature, reality and appearance.

2) with the nature of the expressive means, the manner of which reveals itself to our perception as a world in itself.

3) with the strength of our feelings and perceptions with which we encounter nature as such as well as the nature of the expressive means in the formative process. In other words, how we bring the experience of nature into harmony with pictorial feeling.

Every pictorial form is based therefore either on a direct encounter with the experience of nature in the fathoming of appearance that affects us as visual experience (in this experience all life processes are enclosed in space inasmuch as they reach us optically), or is based further on the property of the formative elements to combine to higher values where they start to emit supersensitory effects to the point that these effects are fully in accord with the experiences on which form is based.

Form, as the spiritual prerequisite (neo-objective art), furthermore, can confine itself only to the interpretation of expressive means in its supersensory effects. We realize then our pictorial projections and visions in direct proportion to the mode of the expressive means. The formative elements must relinquish their real meaning in favor of a higher spiritual effect. Thereby they need not deny their material existence. The supra-real is not in the factual realm but in the effects of its relationships. The supra-real attracts us as a spiritual property. Appearance must be plastically interpreted (Visual experience). Form must realize this interpretation two-dimensionally. The following causative effects are active in the formative process:

1. the three-dimensional interpretation of two-dimensional experience;
2. the two-dimensional realization of three-dimensional experience (on the picture plane);
3. the three-dimensional interpretative experience from the two-dimensional realization of form.

Every pictorial form is based on plastic interpretation of expressive means either on the plastic interpretation of experience of nature, or on plastic interpretation of our projections and visions that we bear within us as a spiritual world. The plastic interpretation of nature is supported by the conception of nature as a living, plastic, and spatial unity. The elements by which nature appeals to us as a plastic unity are color, light and form. The functional property by which nature appeals to us as a living entity is of movement, tension, rhythm of form, and in the tones and harmonies of color. In the plastic interpretation of nature, color and form always appear as volumes and as such they maintain an interchangeable relationship.

FORM II
Pictorial Means

Graphic Means of Expression: Form always presupposes pictorial means which are Form's ways of realization. The pictorial elements of the graphic arts are: the point, in reality a surface, as is the line that emerges from the movement of the point; through this the straight line, the curve, the circle are derived. The line has always spatial meaning, moving as it does from one spatial point to another point in space. The line may have a greater or lesser expressive weight --it can be strong or weak, turbulent or quiet; and therein lies its graphic expression.

In an arrangement of volumes around a compositionally voluminous center, in Cezanne's sense, the preliminary is found by which Line becomes the rhythmic carrier of composition. (See Figure).

The line always has a double meaning. It characterizes simultaneously the object and the space, that is neighborhood to the object. A line results from the impact of two surfaces, which have spatially very different meanings. A line can appear as a painted spot. In this function it can represent a multiplicity of painted spots as surfaces with varied meaning in color as to intensity, brilliance and voluminosity.

A line both separates and binds. The line flows in spatial extension in-and-out of space. A path must be created for the eye on the picture plane. (See Figure) Line is an important carrier of rhythm. We differentiate between linear and surface rhythm. If the line returns in its extension to its starting point, it has circumscribed a plane. The plane is the formative element of the composite pictorial arts, of painting, graphic, plastic, architecture and applied arts. We differentiate only a few geometric surface planes, the square, right angle, triangle, sphere, etc. Geometric forms are purely mathematical shapes. Their expression is relatively cold when compared with amorphous forms that are sensed as warmer. When their contrasting qualities are brought to a spiritual--that means to a plastically responding--relationship, they are capable of pictorial realization as an artistic experience. The picture plane itself is a surface. The outlines of this surface encompass a given space.

This space is two-dimensional. It is a flat surface. At the same time this flat surface contains three-dimensional meaning if we draw a dissecting planal system on to the pictorial surface. If we draw in a non-dissecting* planal system, we get only a two-dimensionality that is decorative, a sample of ornament. The dissection always brings depth impulse to expression. The depth impulse is developed to a pictorial surface through the relationship of the planal system, when the experience basic to form has found its plastic expression. The depth expression determining the form must not destroy the two-dimensionality of the picture plane. The total spatial fixation depends upon the relationship of the first plane to the picture plane. The common denominator for the total system of relationship should be found in the first plastic relationship; this dominates the more subordinate spatial fixations if the planal system represents a spatially plastic unity in each stage of development. If one of the succeeding relationships is not absorbed into the system of relationships in the sense of the common denominator, then form sections fall out of the picture (if the tensions are too widely spanned), or holes occur in the picture (if the tension relationship in reference to the common denominator is too tightly spanned). Relationships can be only intuitively gleaned by sensitivity, never intellectually captured by mathematical reckoning. If the form does not have a common denominator, theneither spatial unity or color unity and, of necessity, light and pictorial unity are disturbed.

If pictorial unity is disturbed, the plastic elements of form are not restored to the two-dimensionality of the picture plane. Such pictures destroy the idea of the architectural wall they are to enhance, and disturb simultaneously the idea of architectural space in which they are housed. In a picture that is not two-dimensionally closed, formal fragments tread by illusion out of the picture into the architectural space, thereby limiting its effect; or pictures may develop within the picture which show by illusion the wall on which the picture is shown. Thereby the wall and simultaneously the architectonic idea of space is disturbed.

If the common denominator in relation to experience is hazily grasped, then the form as a totality will be weaker than a form in which the common denominator forcefully dominates the development of form in its entire compass.

*non plastic controlled

The common denominator is predominantly subjectively conditioned by the strength of the artist's capacity to experience. In the development of form it must always be considered how one factor maintains itself against the other, and how everything maintains itself in relation to the whole. Only thus can arise spatial and coloristic unity and simultaneously light unity and the unity of spiritual utterance. If the balance of the pictorial surface is not re-instated in every phase of development, then one part of the picture predominates at the cost of another part. This means that the contrasts developed through color differentiation are wrongly grasped in relation to two-dimensional balance. This disturbs the pictorial surface. Thereby a naturalistic spatial effect is created. The picture is no longer a totality--it falls into pictorial fragments. Every fragment is a picture in itself. The separate pictorial fragments create a scenic composite effect, isolated spatially and spiritually from one another, and they are unconnected and appear arbitrarily placed together. They create a realistic effect and spoil the spiritual effect of unity. Form is based upon spiritual perception of the living and rhythmic connection of things and upon the rhythmic enlivenment of expressive means in the sense of pictorial unity. The absolute two-dimensional enclosure of the pictorial surface means finally the termination of pictorial development through collecting the light to its highest unity. So the composition has reverted to the simplest formula. Cezanne says:

> "If color has maximum richness, form is at its fullest. Closed form lends the picture rest. This does not preclude the spiritual movement of form. Two-dimensionality without depth is decorative (in the negative sense). Depth, two-dimensionally realized, produces (ie. eliminating every intersection) purest plastic (Mondrian). Depth, not reflected back into two-dimensionality produces a vacuum--that is, lifeless space--a hole in the picture as well as in spiritual communication. Depth plus depth echo equals two-dimensionality, space fulfillment. Space fulfillment is not the additional result of the two- and three-dimensional. <u>Space fulfillment is the product of the function of pictorial means in relation to depth experience and the resultant movement projections</u>.

This touches upon sensibility for forces operative in the formative process: harmony or disharmony of colors, the congruent simultaneousness of light, etc., space fulfillment, light unity, color unity, spatial unity, unity of spiritual utterance, two-dimensionally closed forms are identical in their being with the essence of form and the picture plane. If the picture plane is not two-dimensionally closed, then the surface expresses an unquiet effect that carries over to the observer. Every value projected into the pictorial surface has to be identified with the essence of the pictorial surface. The more we respect the nature of the picture, the more surely nature develops in the picture. - Space is infinite - form is its limitation. <u>The pictorial surface is bounded by its sides--thereby it becomes unbounded for our perception into the depth</u>."

N A T U R E -

II (a)

1) N A T U R E IN "O B J E C T I V E" EXPERIENCE

Esquire Bond
MADE IN U.S.A.
RAG CONTENT

NATURE ...

Nature must be fundamentally experienced in three different ways to be of use for pictorial creation:

1) in an objective way---that justifies the study of anatomy and of geometry in certain limitations.

2) in a visual sense---this must be not contradicted by any scheme of perspective etc.

3) in a plastic sense---this engages the artist faculties of subjective feeling-into the things - the faculty of Empathy.

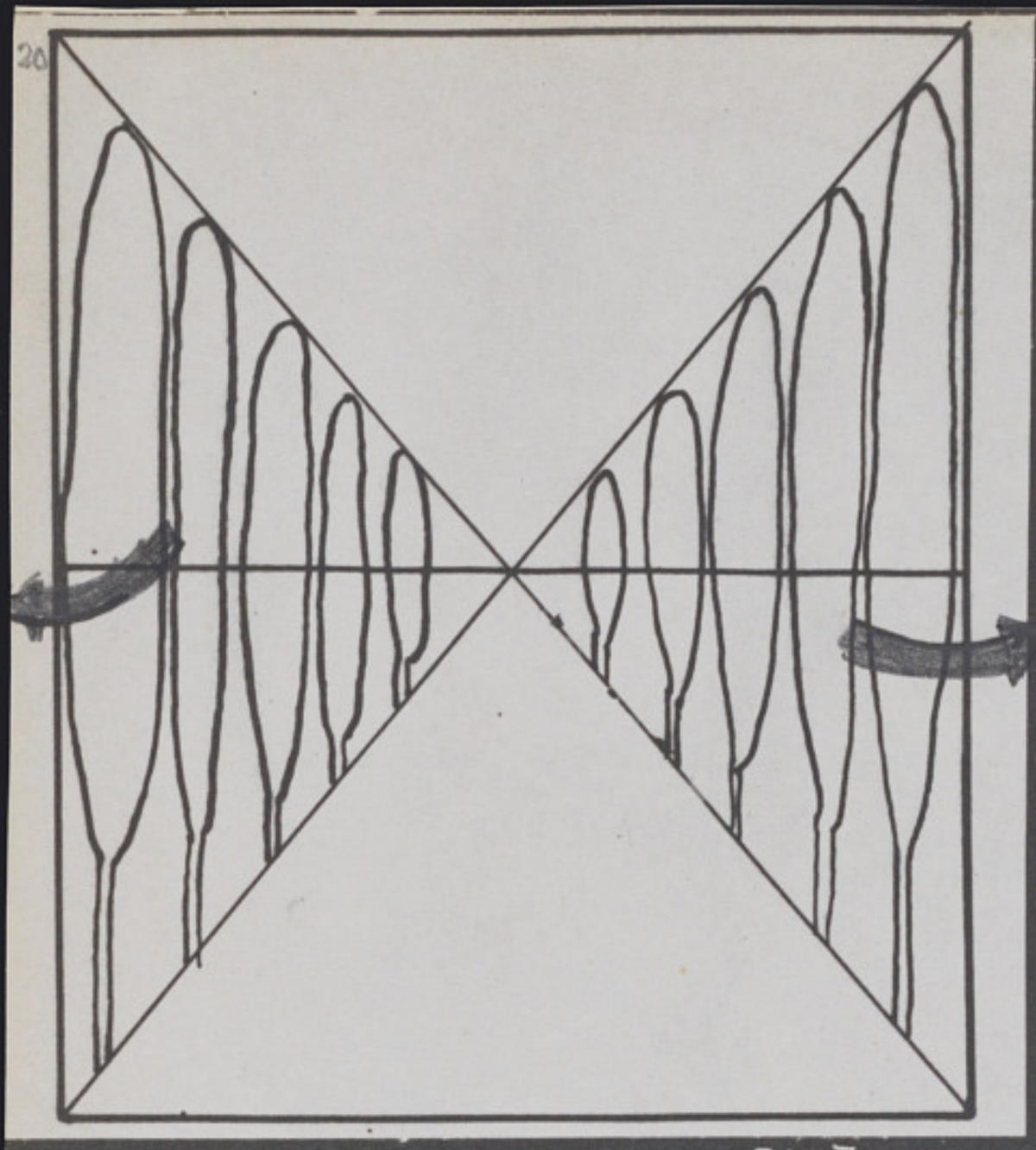


Fig I

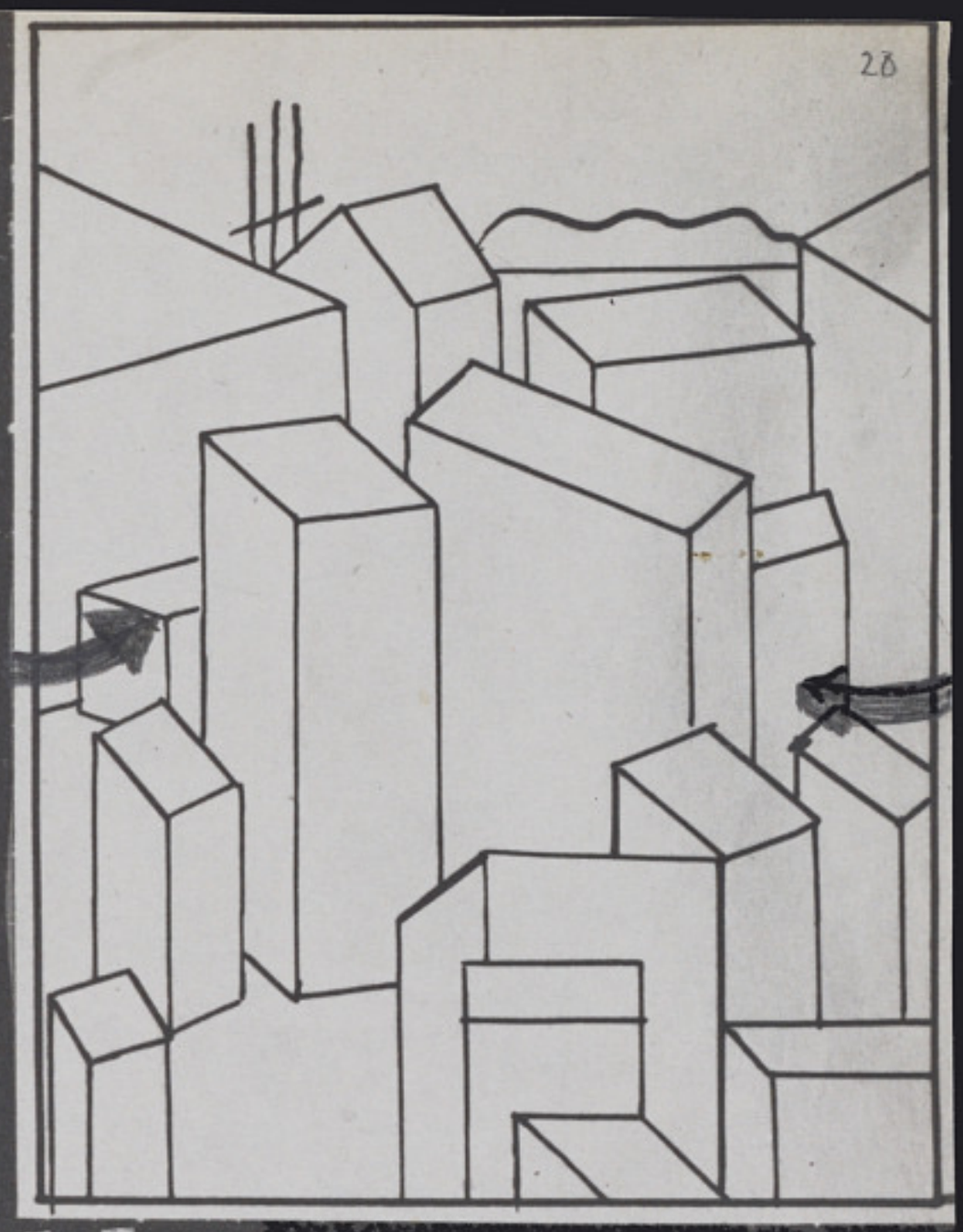
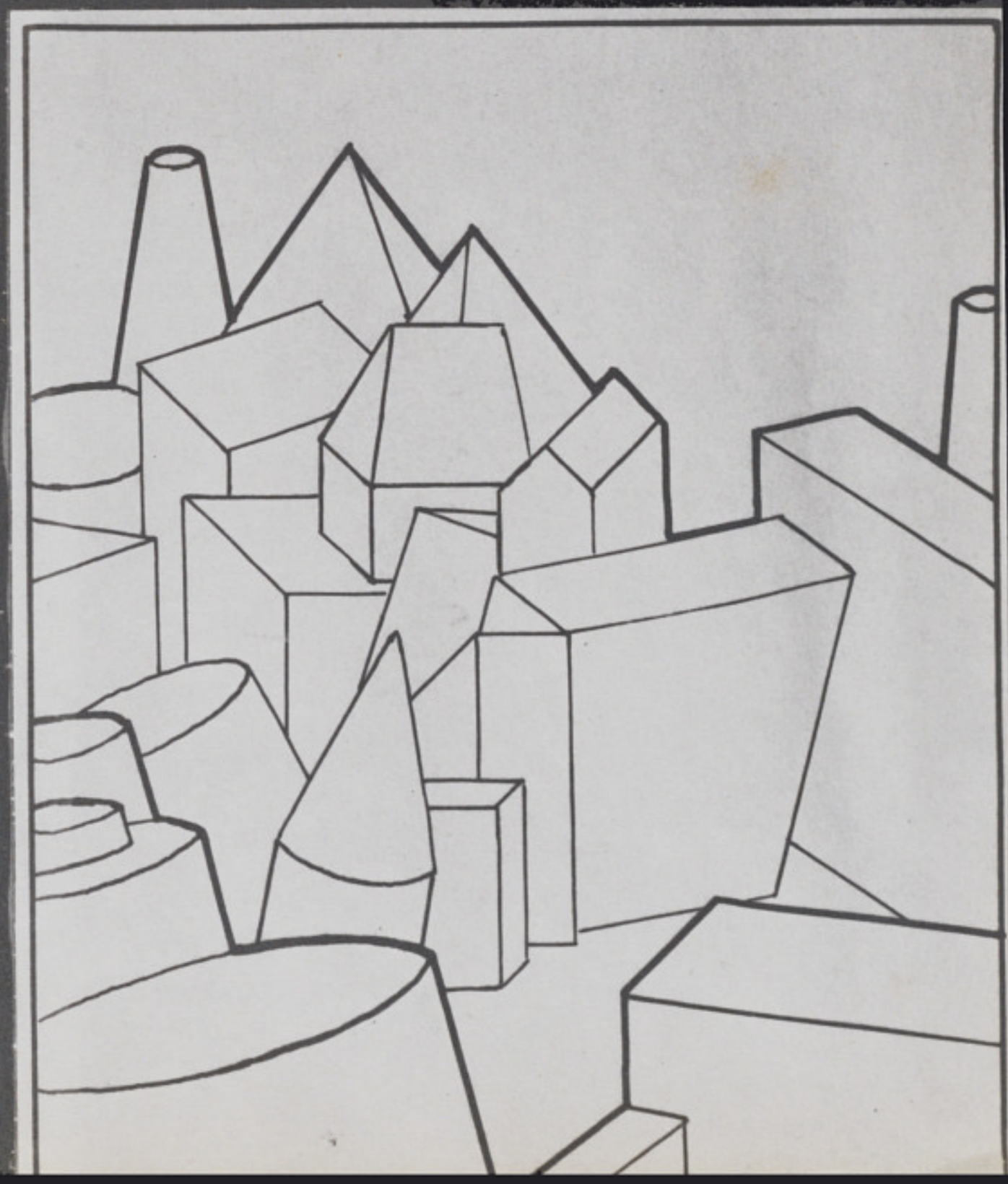


Fig II

Fig III

Central voluminar organisation
is still not yet
plastic pictorial organization.
but it is the conceptional
prerequisit for it and there
is still a very great differance
between: plastic experience of nature
and its: pictorial realizations.



NATURE AS EXPERIENCE (II):

Distinction between
Perspective and central-voluminar organization:

Two outstanding events occurring in the last quarter of the last and at the beginning of the present century are the starting points for this book.

The first occurrence was the coming into existence of Impressionism--the second, a revolutionary statement by Cezanne regarding the conceptual basis of the plastic arts.

For the Impressionists, nature was inaccessible to plastic control toward pictorial unity. Nature however provided them with a unity that was of the atmosphere and of light, and it was the realization of this unity that brought their productions back to long lost horizons: the pictorial two-dimensionality.

The importance of this great discovery waned however because of their inability to organize the three-dimensional formal content of the picture upon the two-dimensional surface of the canvas. This dilemma provoked Cezanne to the following basic explanatory statement which he wrote to his friend Emile Bernard on April 15, 1904 (slightly but not conceptionally changed):

> "Let me repeat what I have already said: In nature you must see everything in relation to the cylinder, the sphere, and the cone in such a way that each object moves around a central point in and out of depth." (See Diagrams 2 and 3).

Cezanne's statement became the starting point for an entirely new conceptual orientation in painting. Its direct result was Cubism and Cubism was the answer to the decline of Impressionism. Cezanne's utterance was at the same time an open revolt against the pedantic application of Italian perspective. Italian perspective encompasses only one main line of movement on the picture plane: away from the spectator into the depth toward a vanishing point on a horizontal

line (See Figure I). The result is a one-sided direction of movement. In other words: it is not really movement, since movement always asks for counter-movement. Space conceived in this fashion has no depth echo, it is petrified and without life. And the representations based on such a scheme are without mind and life. Such pictures have in reality no end and no beginning, because they can be willfully enlarged ad infinitum without changing the expression whatsoever. The resultant effect is like music without overtones. A much deeper penetration into the laws of plastic form was necessary, however, in order to illuminate Cezanne's statement 'as a meaningful part' in the complicated-whole of plastic art. A picture must represent a conceptual unity, its message must be bounded by a beginning and an end. This means technically: that the composition begins and ends with the outside lines of the picture plane. The outlines of the picture must be the first lines of the composition, and the total of the artistic message must come to an end within them. (See Diagrams 3 and 4). Everything must be related to these boundary lines: this alone secures composition.

Composition conditions balance in the organization of the picture plane. This asks for a deep understanding of the essential nature of the picture planes, in other words: of its laws. Composition conditions technical and conceptual inflections and unification.

Space, in our concept, is unified by limitation and is not arbitrarily extendable as allowed by Italian perspective. See the arrows in Figure I. They show the possibilities of such willful extension of space through arbitrary widening of the picture format. Space is not conceptually unified in this way.

In our concept the space conditions a central voluminar movemtnt-organization which includes us as its mid-point. This secures space that is conceptually unified, ending with the outer lines of the picture format. In Figures 2 and 3, the arrows represent this. It is seen that they have the reverse effect of Figure I.

x mentally

Cezanne's work is proof that his statement is to be understood only in this sense. It refers only to the objective understanding of nature, and is wholly meaningful only as a pre-condition to the visual experience of nature. If otherwise understood the statement may give rise to confusion or to academic misinterpretation.

The conceptual difference between Italian perspective and plastic experience is enormous. Conceptually the difference between visual and plastic experience is likewise basic. And still plastic experience is not yet pictorial experience, but it pre-conditions it. Visual experience without plastic interpretation is meaningless--it will result merely in empty decoration and false stylizations.

NATURE AS OBJECTIVE EXPERIENCE (I)

The Object -

An object can be manifold in the separate parts of its form - in the totality of its form it can have only one shape which designates it as this particular object. The human figure is anatomically manifold in the separate parts of the body. All these parts together are again the form of the human body. So we speak of the body and its limbs and we dissect the body descriptively into head, throat, trunk, arms, legs, etc. All these anatomical parts have one intrinsic form by which each part is differentiated from the other parts of the body. Beyond this fundamental difference all the parts have individual characteristics. The fundamental shape of the head can be square, triangular, or form a right angle, and be long or short, and, relative to other parts of the body, small or large, light or heavy, meaningful or negligeable, etc. The component identity of the parts of the body with their biologically inherent characteristics results in the pictorial type in which the human body is presented to our visual experience. Form further presents to visual experience points of individuality inherent in every living form. In pictorial representation therefore we distinguish between inanimate, dead, inexpressive form; and living, force-filled form.

When the pictorial representation is confined to reproduction of the object in the literal biologic-anatomic sense, the depiction is only an illustration of the object. Descriptive works of this type are important for scientific and other illustrative purposes. Literary pictorial works that differ only from an outright imitation of an individual object by multiple enumeration of objects in the sense of narrative arrangement are likewise not art.
We often find this class of works in illustrations and in certain types of so-called murals. Content and execution are not pictorially conditioned. The result is a peep show or a literary product. So long as the objective form speaks only for itself, it is conditioned only by narrative interest.

Objective form may, however, solely with reference to its traits, or in the functioning of such traits, be extremely interesting artistically. We speak, for instance, of the grace of an animal or the charm of a woman. We are describing the play of movement in the form-relationship peculiar to a particular animal or an especial woman. Nature is boundless in its changeability and invention of new relationships. The dance is the most perfected artistic expression of such forms and relationships of movement.

FUNDAMENTAL APPROACH TO
VISUAL EXPERIENCE OF NATURE -

The Behavior of Volumes and Planes:

1) We experience nature objectively in volumes and planes around the central point of vision.

2) We master Volumes and Planes on the basis of their 'common' characteristics -

3) The 'common' characteristics are the few elementary axal possibilities of substantial bodies in the experience of volumes and planes.

4) The 'common' characteristics of planes are the few elementary horizontal and vertical axal possibilities of the planes.

Common characteristic of all voluminas

27

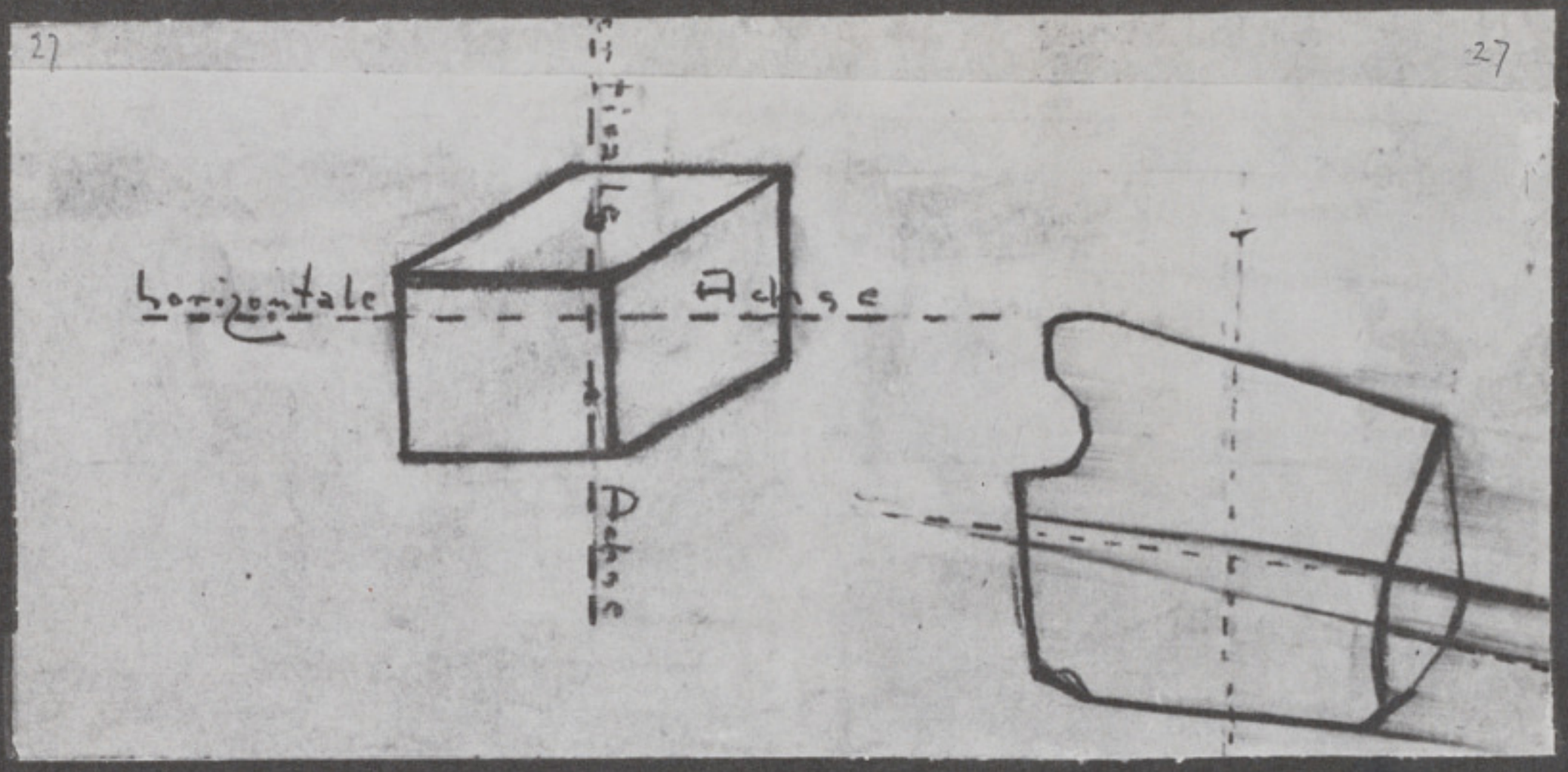
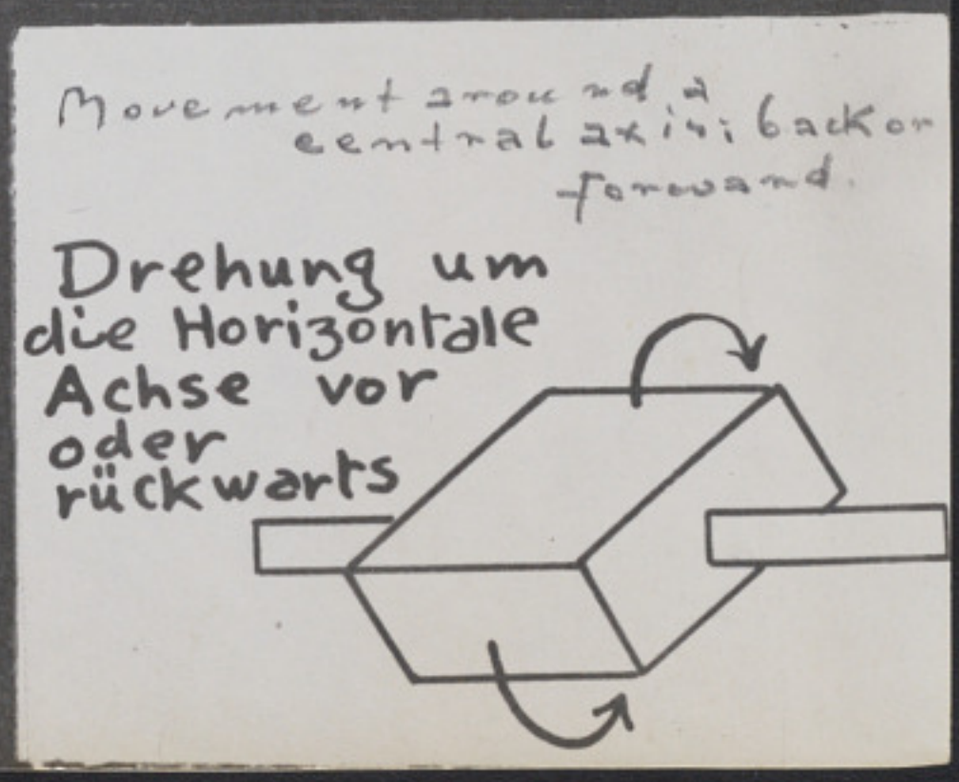


Fig III

THE FEW ELEMENTARY AXAL POSSIBILITIES OF SUBSTANTIAL BODIES

In our concept, every substantial volume, no matter how complicated the formation of its details, moves within the scope of its totality around an imaginary horizontal and vertical axis. All movement of volumes - whatever the details of the formation of the volumes - are dependent upon the position of these axes, or more accurately, dependent upon the spatial relationships of these axes to all other axes that are under consideration within the framework of the total picture. The relationship awakens a feeling for the unity and inseparability of the representation.

Fig IV

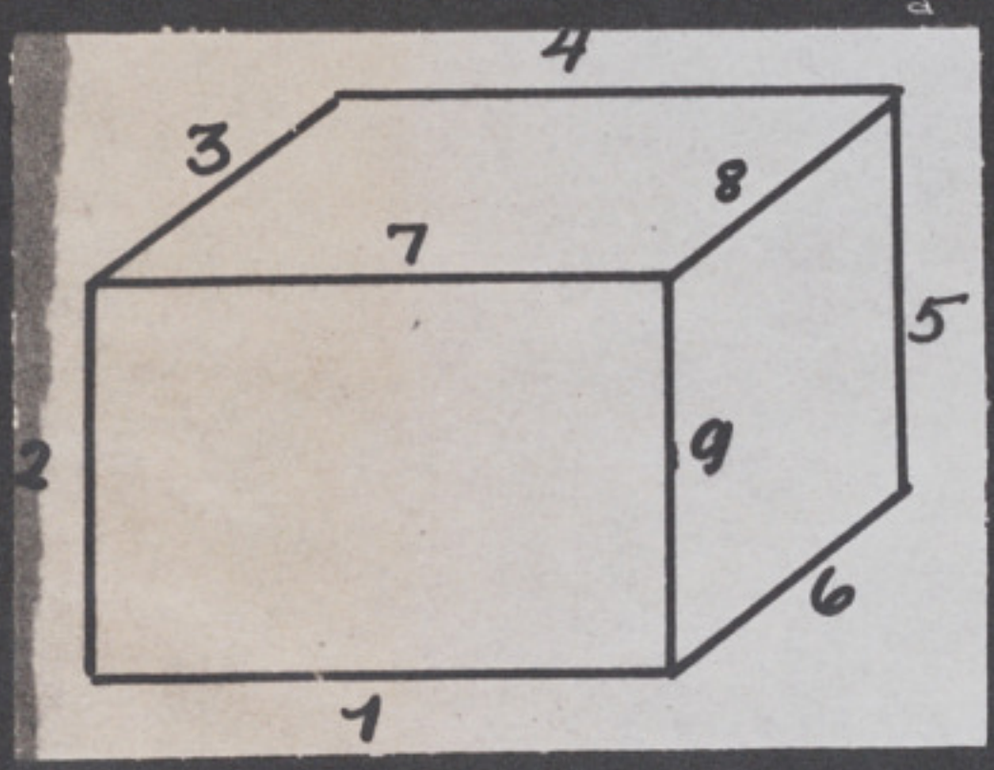


Reduction of volumes to planes.

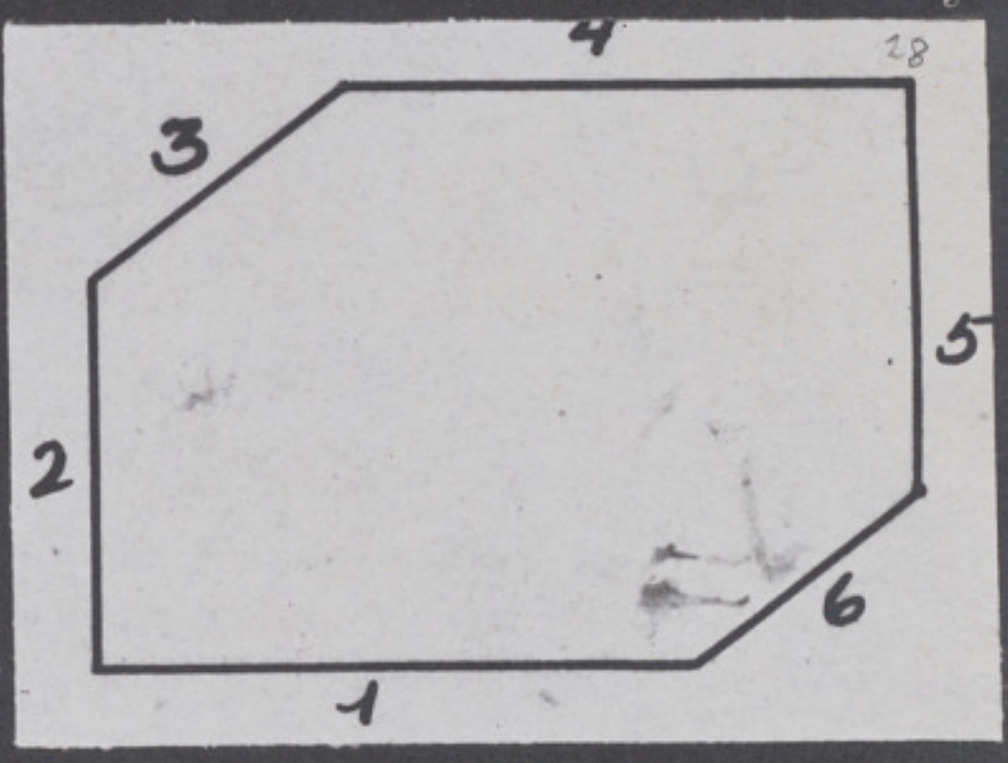
Our spatial perception rests on the concept of the spatial variety of volumes. However, we cannot (directly) form by three-dimensional means (on a flat surface). We feel and we think in volumes. But we must realize our three-dimensional concepts with the aid of two-dimensional form means. Volumes are surface pictorializations. The volumes project themselves in appearance as surface planes that face us. Every volume can be reduced to a surface plane if its inner structure is destroyed. In its external lines it is a plane and therefore it can be handled compositionally as such. The object in the compositions of the old masters are subject to this plastic principle. They function primarily as surface planes in their relation to the picture plane.

Fig. VI

Fig. V



volume

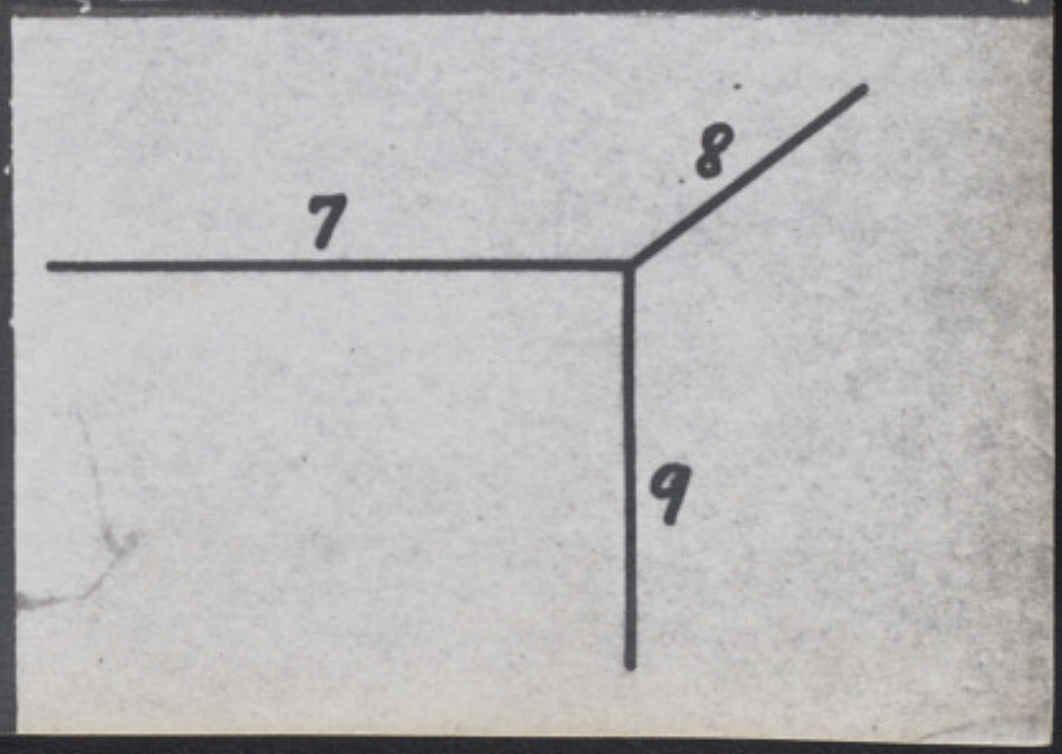


plane

(When one ignores the inner structure of the volume – it presents itself as a plane

inner structure

Fig. VII



PHENOMENA OF SURFACES

Fig. VII

If surfaces do not represent a firmly grounded system of relationships they are open to an ambiguous interpretation. The most complicated surface has only a vertical and a horizontal axis. In a system of relationships vertical axes are opposed to other vertical axes, horizontal axes in opposition to other horizontal axes.

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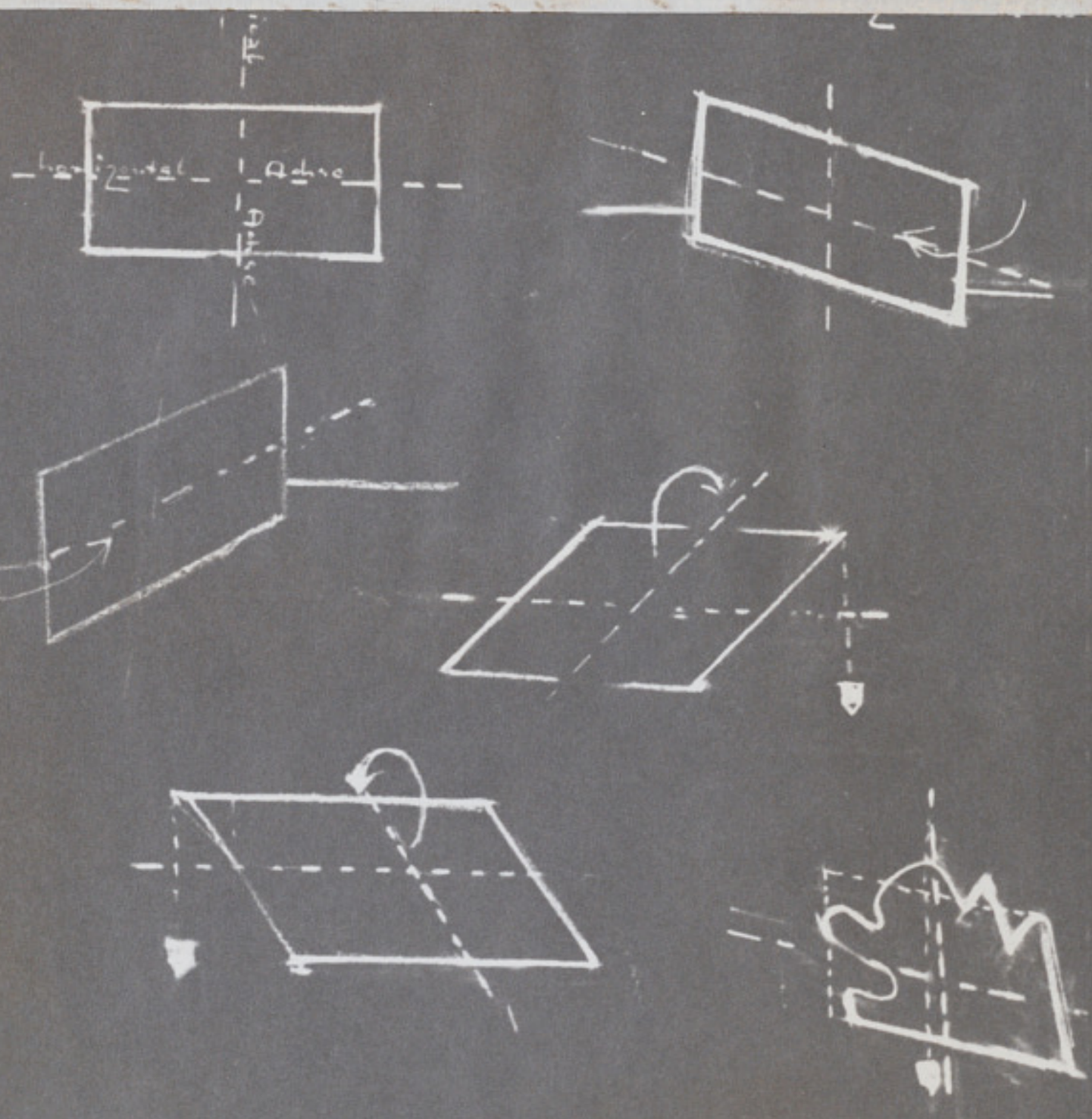
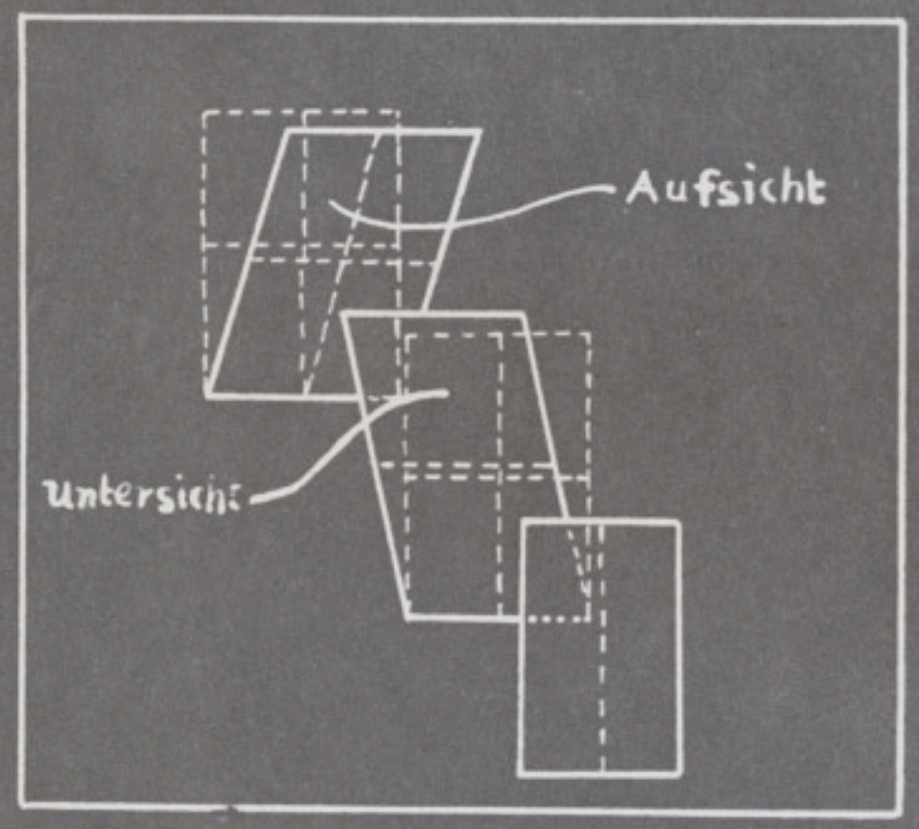
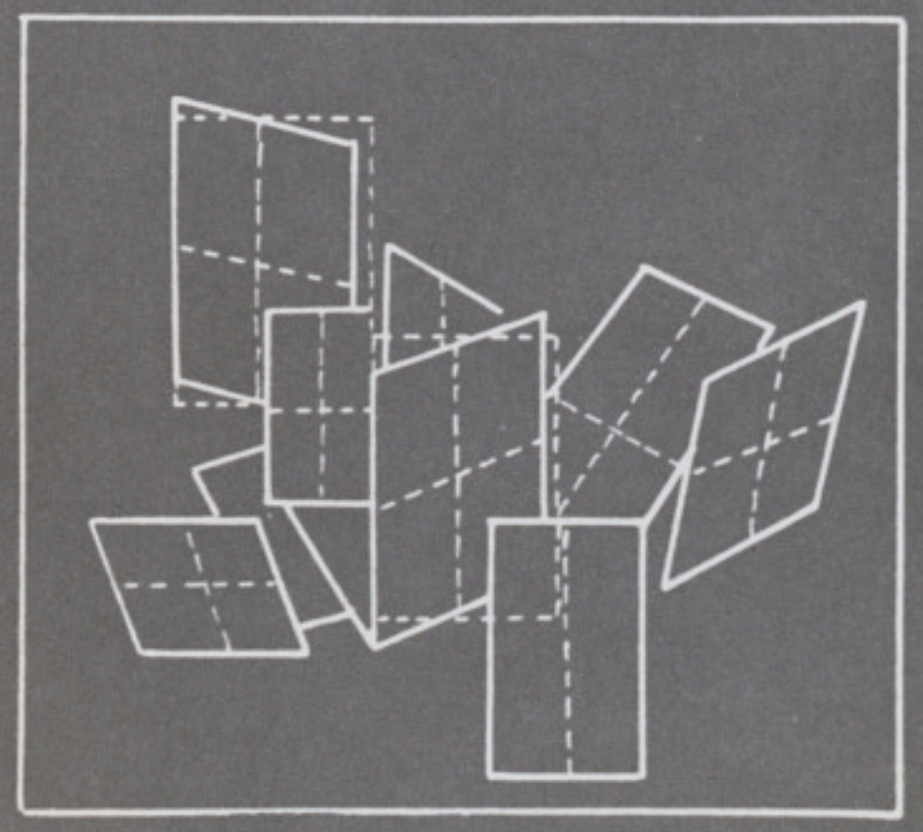




Verbindung von Flächen



Opposition von Flächen

Formation of the sense

of space — —

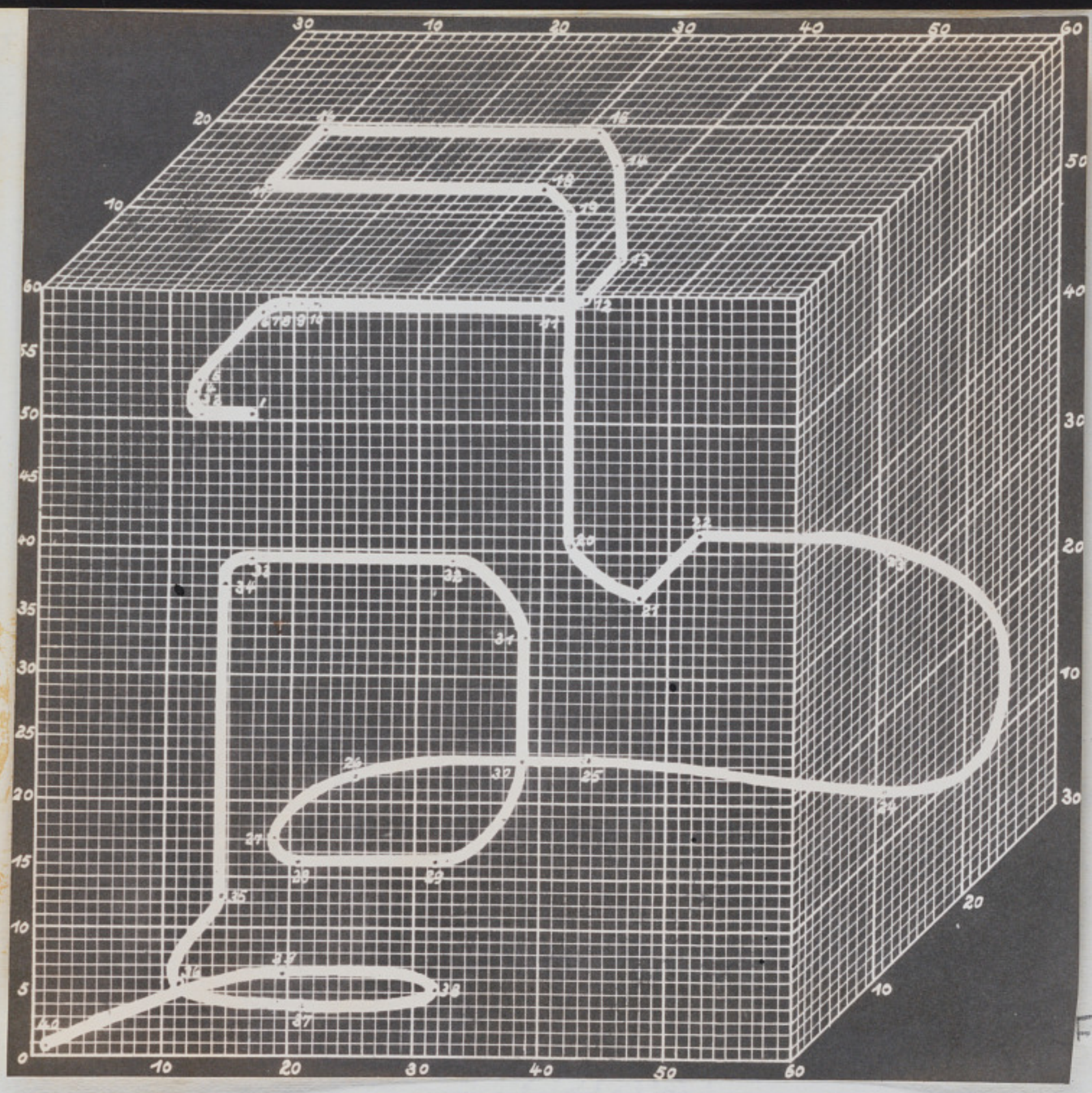


Fig 14

Formation of the sense of space —

all pictorial art is based on the sense of space —

To the artist everythings is cosmic related —
From it the sense of space has developped —

The line flows in and out of space —
when the line is spatial interrupted — she still has rhytmic continuity —
by passing the limits of the objects through Free space into connection with other objects

Points are spatial related in the same way —
and Planes carry spatial rhythm in their relations

Introduction to nature as experience - -

Beauty of space will not be apparent by conceptional exclussion of the Forgoing consideration.

— — —

We differentiate between Line Concept and between Plane Concept

between Linear Rhythm and between planar Rhythm

reversed printing demonstrates a very different space sensation

32

In the following tabelle an attempt is made to give proof to the „scientistic mind" how complicated the flow of a Line through space from one given point to another can be: this is done in relation to the movement of the line in the foregoing Figure:

No.	T	B	H		No.	T	B	H		No.	T	B	H		No	T	B	H
1	6	12	46		11	22	25	44		21	22	33	21		31	19	25	20
2	6	8	46		12	23	27	44		22	29	34	21		32	19	19	26
3	8	6	46		13	28	27	44		23	29	47	21		33	19	3	26
4	9	5	46		14	28	27	52		24	29	48	2		34	17	3	23
5	10	5	46		15	28	25	54		25	30	22	2		35	17	3	1
6	18	5	46		16	28	3	54		26	29	4	2		36	7	4	1
7	19	6	46		17	22	7	54		27	22	3	2		37	4	18	1
8	20	7	45		18	22	25	54		28	19	7	2		38	6	28	1
9	22	8	44		19	22	27	52		29	19	18	2		39	8	14	1
10	22	9	44		20	22	27	25		30	19	25	10		40	0	1	1

T = depth
B = width
H = height

The artist never thinks in such terms:

„he senses relations"

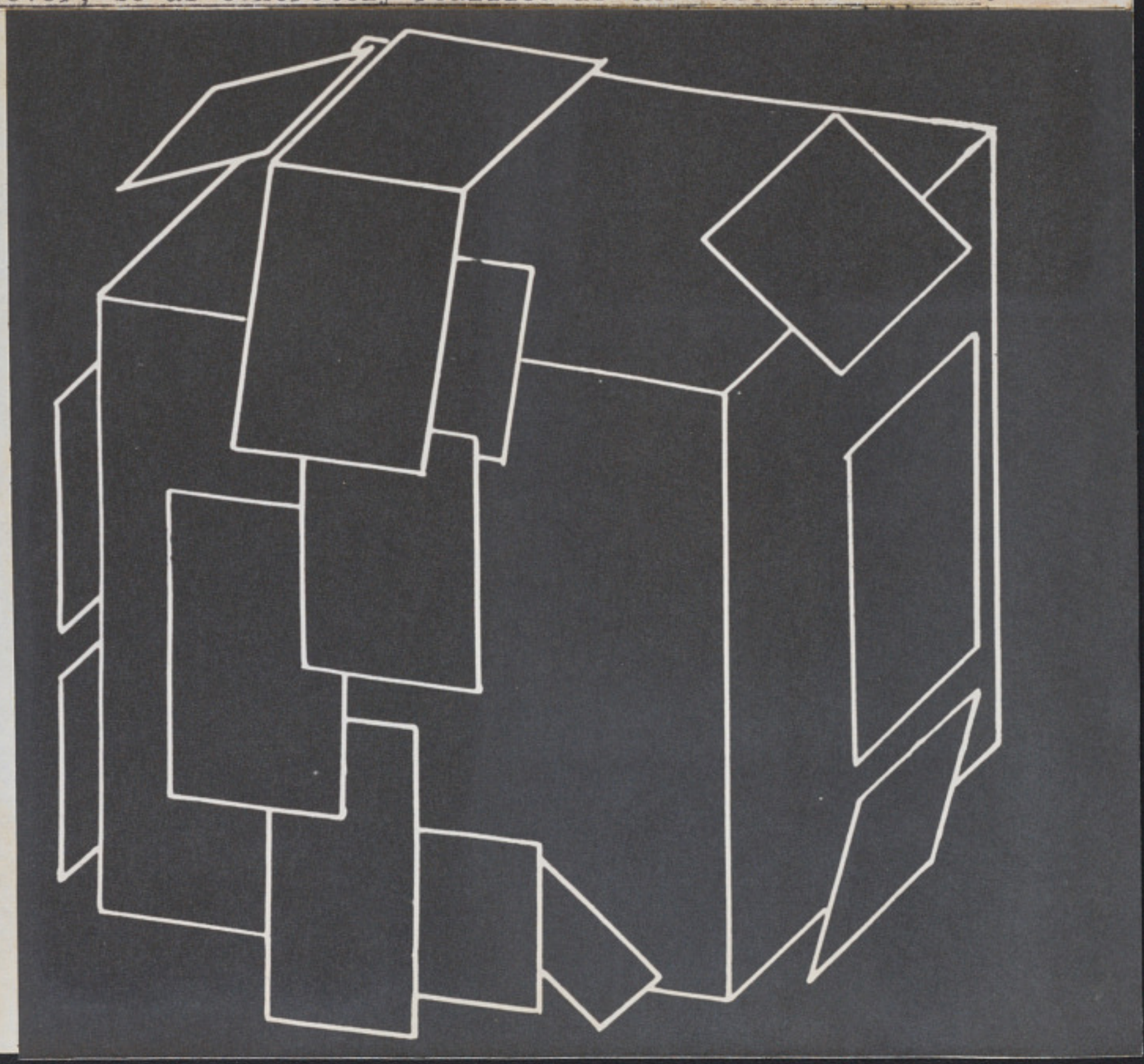
PROPERTIES OF VOLUMES AS OFFERED IN NATURE

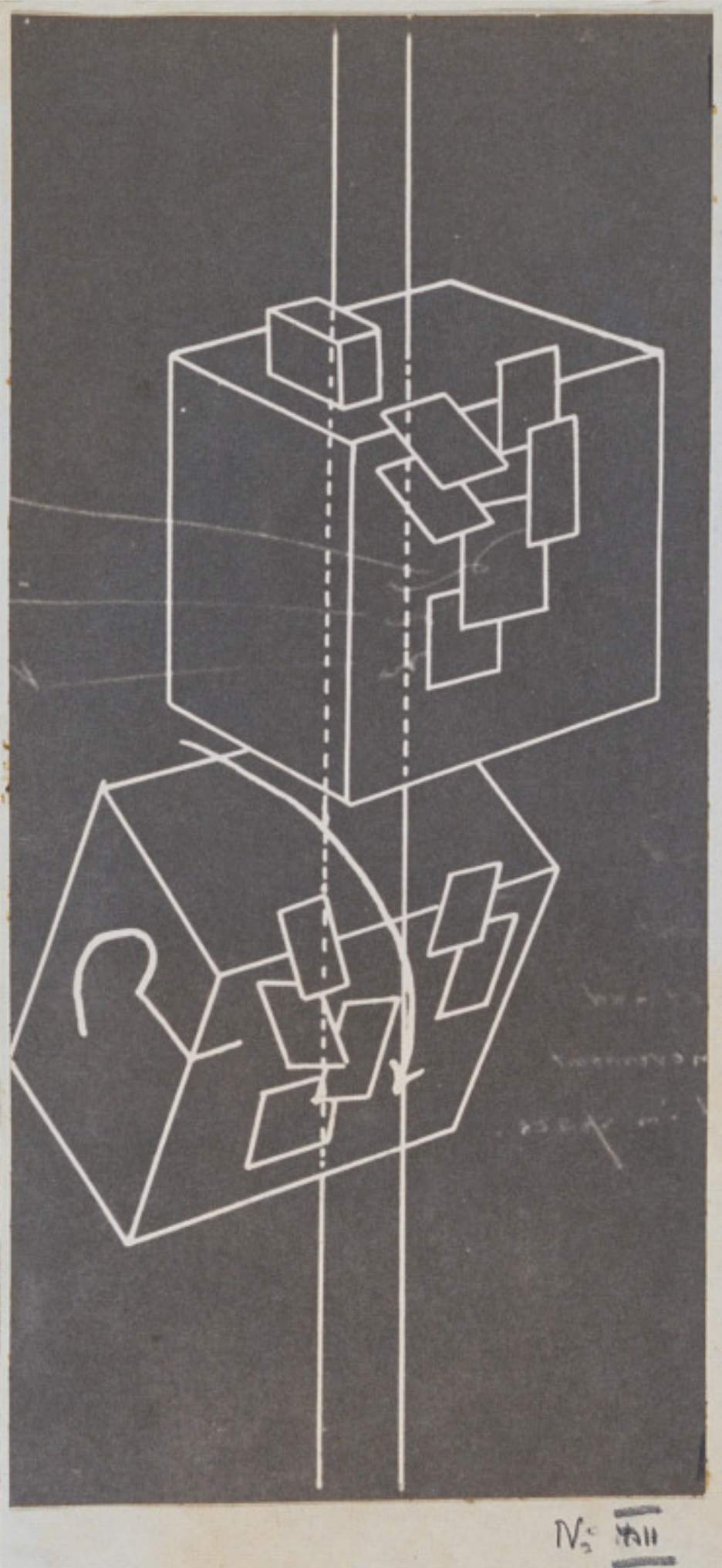
33

Bodies are positive volumes. A body and every form belonging thereunto has a basic form in relation to another characteristic fundamental form. These basic forms are ~~the square~~, the cube, the cylinder, the sphere. Perhaps basically the head is not a sphere - but it becomes a sphere in comparison with a form that presents itself basically as a cube. Bodily forms, regarded for themselves, are artistically relatively meaningless. Bodily forms take on meaning only in relation to another bodily form. The external surfaces move around the volume of these basic bodily shapes in rhythmic dependence on the basic form and so create the surface tension of life-filled form. The surfaces of the volume never distort the basic form and vary in intensity with the essence of the fundamental form. If the fundamental form does not appear in the representation, then it really does not exist in the representation - the plastic clarity of the represented form is impaired and the expression and rhythm of the work necessarily suffer. (A flower stalk is not a multiplicity of flowers - nor a tree a multiplication of branches and leaves, nor a forest a succession of trees - rather the many flowers ~~effect the~~ form into a volume, ~~of~~ many branches form into a tree, and so on. A multiplicity of forms given in an object has always as its root the kernel of its mass.

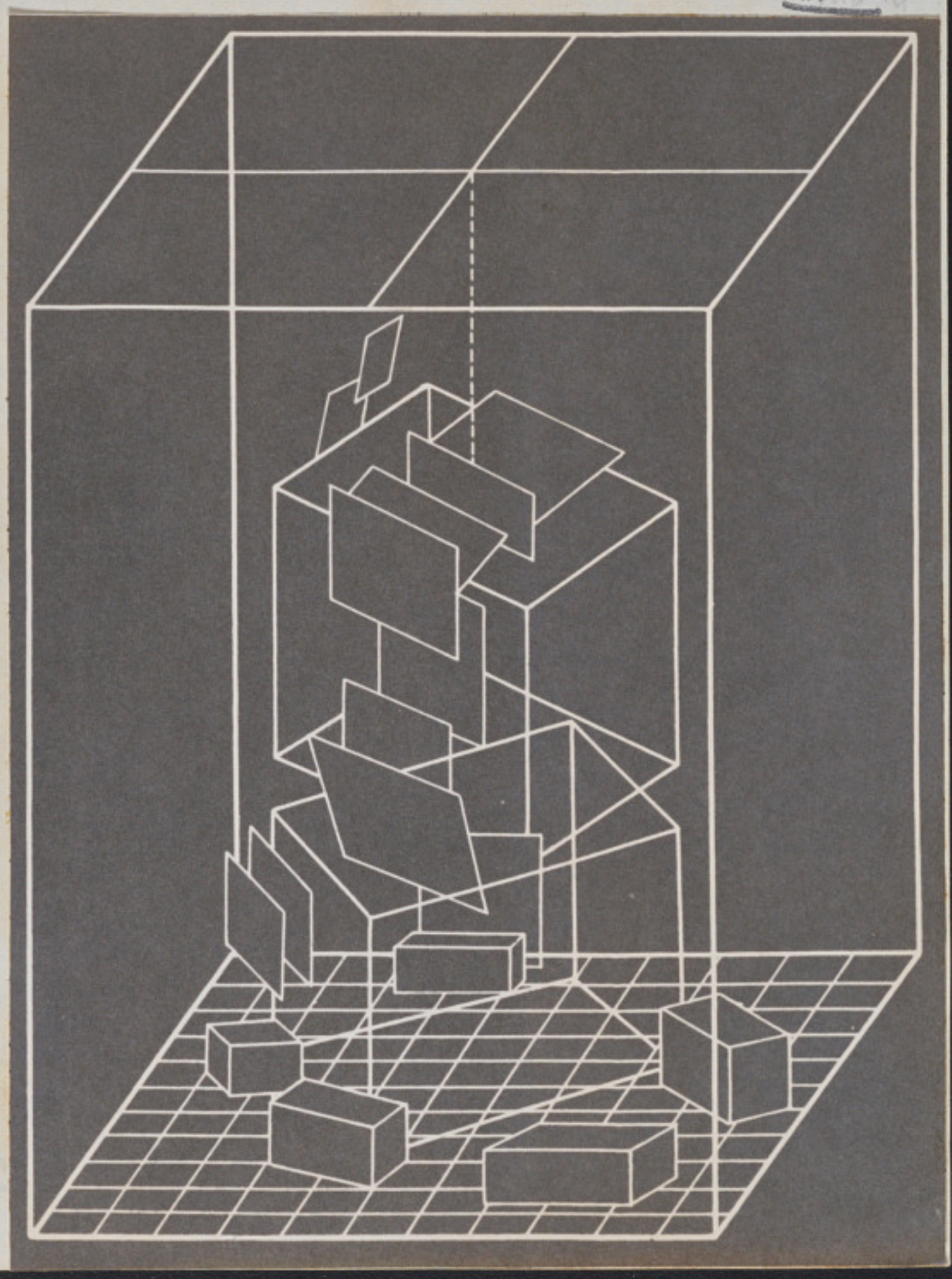
Objects within a given spatial unity are positive volumes; the empty spaces, devoid of objects, are the negative volumes within a given spatial unity; in the form-giving process they must, however, be as concretely realized as the positive volumes.

Fig. 41





IV₂ 48 III



48 III

35

Fig. 410

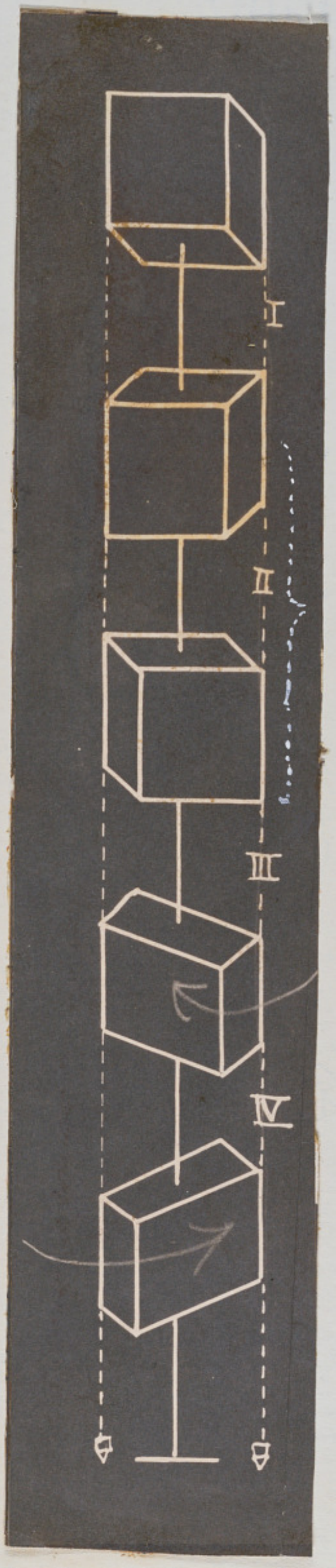
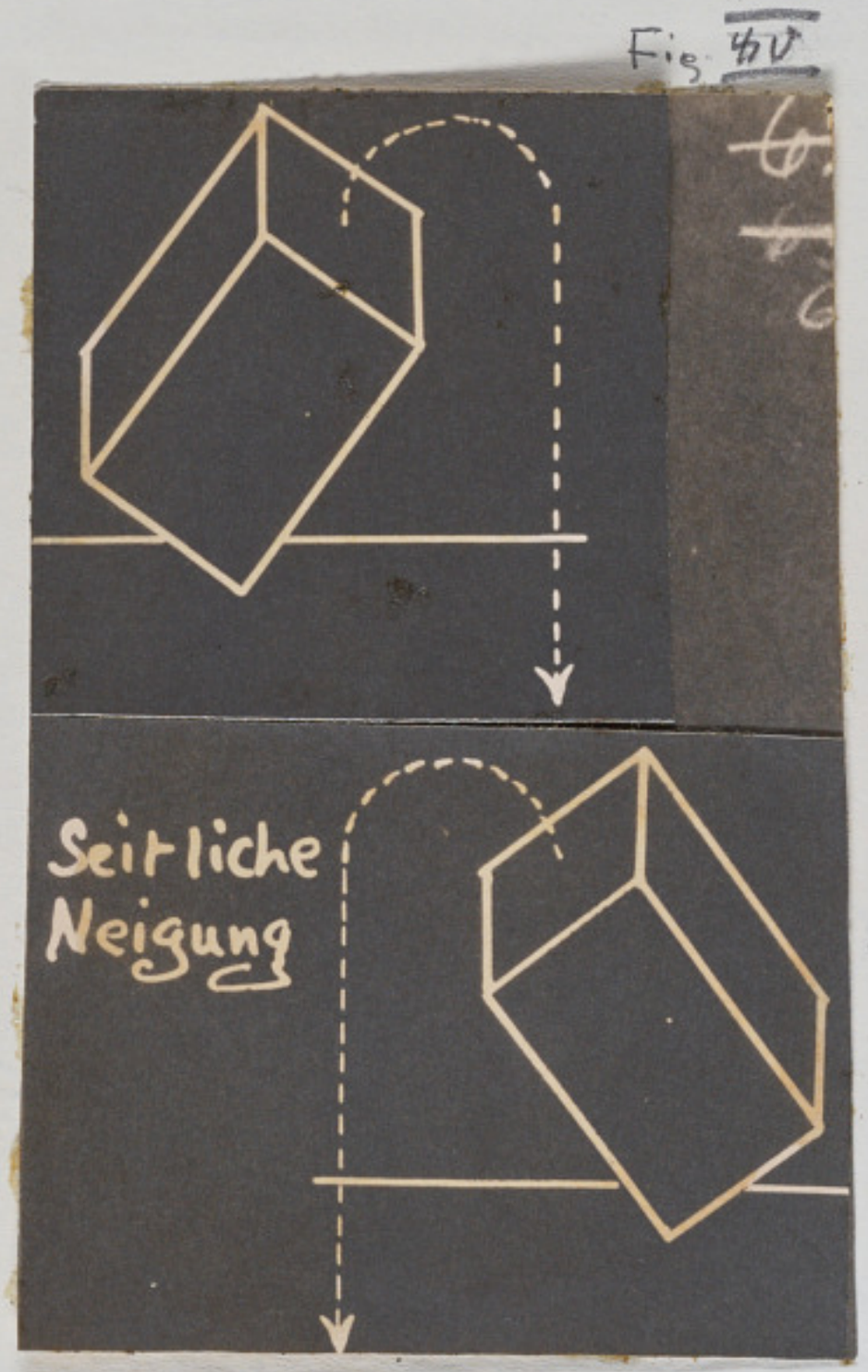


Fig. 411



Relation and opposition

of volumes.

FORM OFFERED BY NATURE IN AN OBJECTIVE SENSE:

Voluminar concept -

Nature reveals its richness of form in the multitude of its objects -

Objects have volume -

A volume reveals all sides in its rotation about its axis. The sensation of rotation is roused by the emergence of volumes into the two-dimensionality of appearance or in their withdrawal. That is, a volume revolves around its axis either toward us or away from us.

If volumes rotate against themselves, movement and countermovement result. The stronger the movement of a volume about its gravitational axis into the depth of the space or out of the depth into the foreground, generally speaking the stronger and more intensive is the sensation of suspense aroused within us. Compare in the accompanying diagram the pair of volumes labeled II, with those labeled III. The latter pair demonstrates intensive motion - through the variety of its revolution we can see the volume either from left or right. (See Volume Pair II). We have learned in the chapter on the origin of perception of movement that this sensation is roused in us not by a continuous change in the point of observation, but through the movement of the volumes, or more accurately, through the relationship in movement of the volumes to a given point of observation. In other words, sensation of movement can be caused by volumes with the same horizontal axes if from the same vantage point they can be seen from various sides. The important effects would be lost in purely linear perspective.

Another very important visual consequence of the rotation of volumes and of their other spatial functioning, is that a multiplicity of volumes may attain, in given circumstances, a visual concentration into a single line.

This then, as an essential rhythmic part of the composition, must be properly regarded as an intensification and simplification.

For the foregoing reasons, it is, in my opinion, a considerable misinterpretation of the artistic concept basic to Cezanne's paintings if it is assumed that the viewpoint of the beholder is constantly shifting outside the frame of the picture. The exact opposite is the case, the observer being included in the picture as its mental midpoint by means of its pictorial totality and of its specific details being referred to this composite central point. The referal of the separate part and of the whole in expressive intention toward pictorial totality is the exact essence of modern art. Even dissonance and discord condition rhythm and harmony as contrasts in order to become an essential element in expressive tension.

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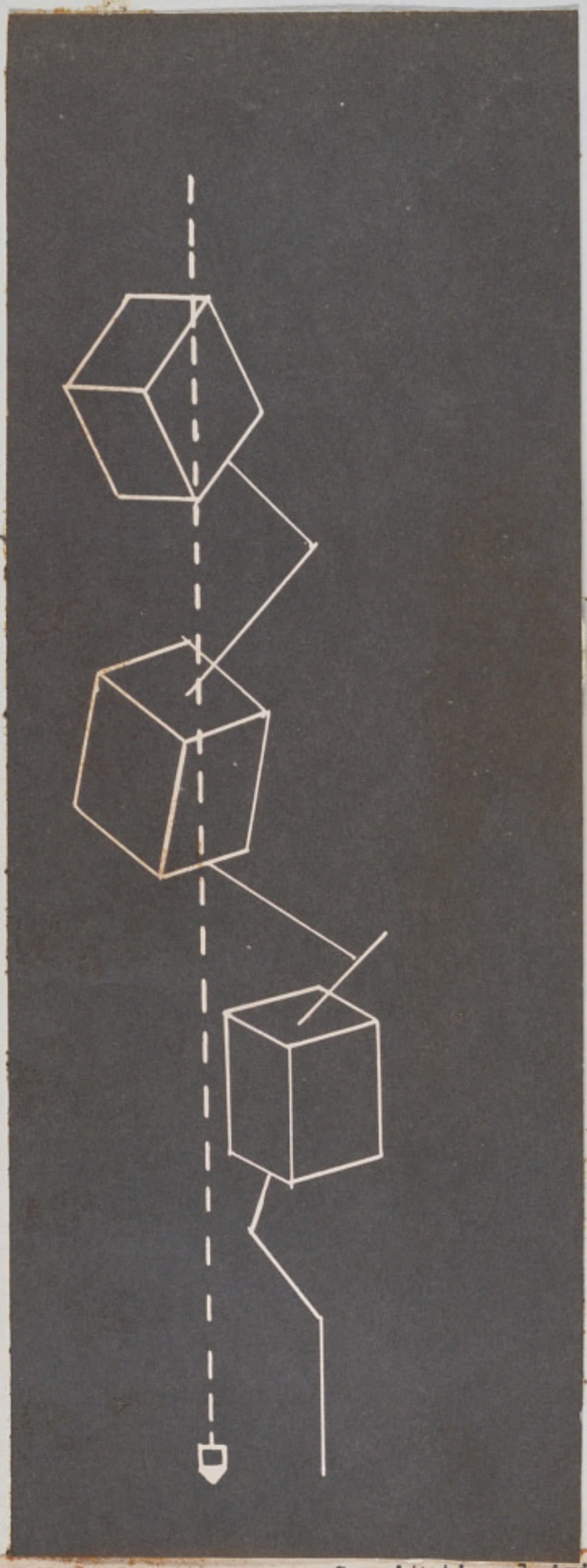
Fig XVI



Gravitational Axis

Volume as well as every dynamic system functions on the basis of its gravitational axis . If the gravitational axis is removed, the entire dynamic system is broken down. The dynamic can only be effected on the basis of the static. The basis of both static and dynamic is gravity.

Positional changes of all volumes must be adjusted to the gravitational balance of the total system.

REALISTIC FORM: THE OBJECT
IN CONTRADICTION WITH THE
ESTHETIC FORM OF THE WORK:

Nature as experience

We experience nature predominantly through the synthesis of the object. To us:

a body is a body,
a tree is a tree,
any kind of animal is this specific kind of animal,
a mountain is a mountain,
a stone is a stone.

We have a definite idea about the object--in spite of the fact that the object may or may not have multi-subordinated parts. All parts together are summarized in the idea of the object and in the idea of the category to which the object belongs.

This is what the layman knows and what he looks for in a picture...this is what the dilletante aims for when he makes a picture, and many artists are conceptionally limited in a similar way.

It is the synthesis of the object that keeps them mentally in a state of hypnosis--that offers them no escape from its tyranny. We are not yet sufficiently aware that our consciousness operates often in a high degree in a negative way with the result that we act as slaves of habit, unfree and automatic--like in a mental prison. It can stale our entire thinking-mechanism and hold us over a long period of time (and maybe forever) in a state of one-track-mindedness that prevents us from making new perceptions.

An artist who works on the basis of such a one-track-minded approach sees himself constantly in trouble. He will be never aware that his work is not creative. That it is already condemned from the start as a failure, because its foundation was not esthetically and plastically conceived.

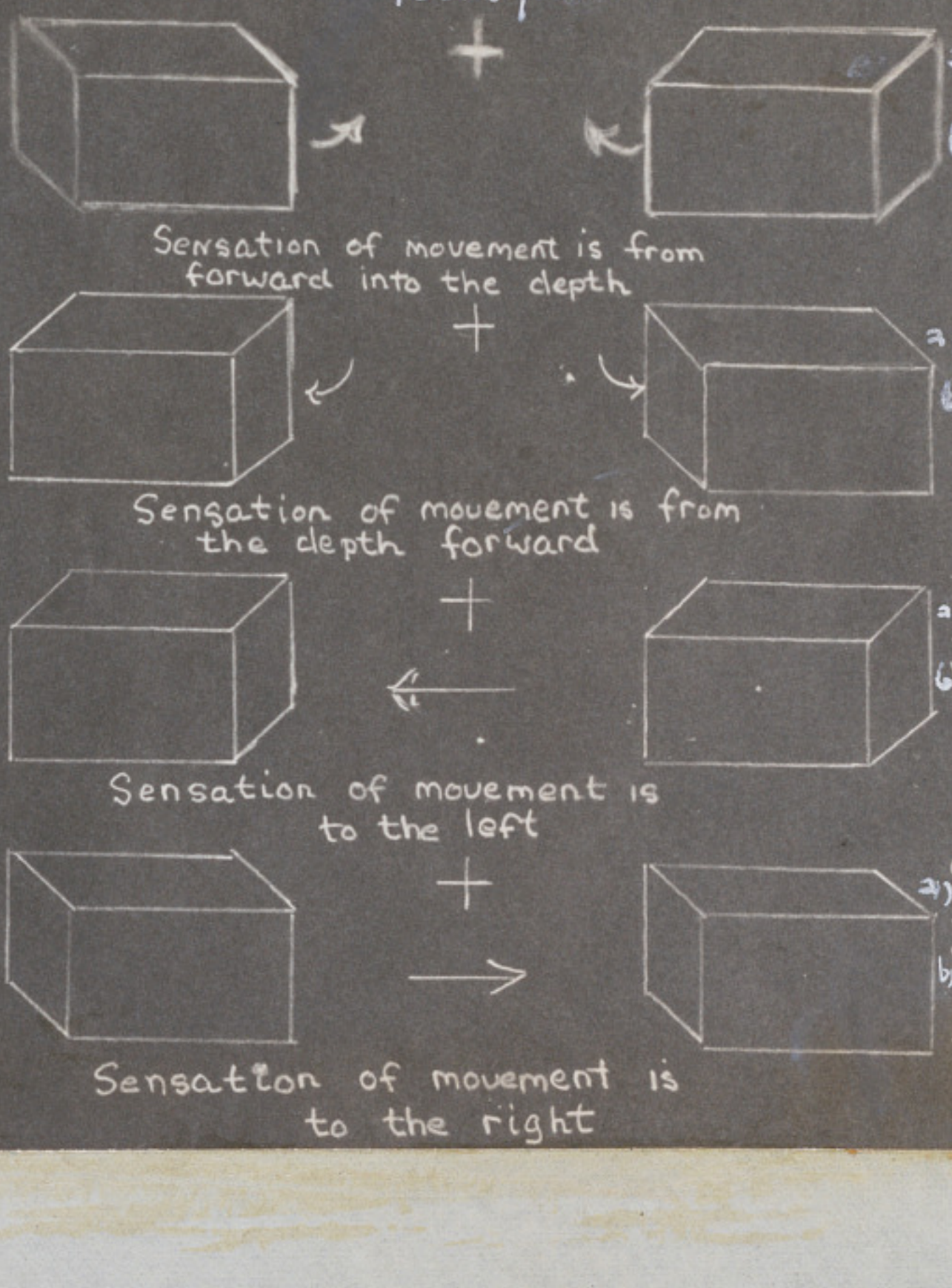
The following reproduction demonstrates the underlying voluminar concept in it -- no further comment is necessary.

SUPERSENSITORY EXPERIENCE OF NATURE

In the supersensitory interpretation of nature, any plastic system that is <u>eo ipso</u> static causes dynamic sensation.

41

Fig. XVII.


Focal point
I
Volume
a) Seen from the left
b) Volume left of the focal point
Volume
a) Seen from the right
b) Volume right of the focal point
Sensation of movement is from forward into the depth
II
a) Seen from the right
b) Volume left of the focal point
a) Seen from the left
b) Volume right of the focal point
Sensation of movement is from the depth forward
III
a) Seen from the right
b) Volume left of the focal point
a) Seen from the right
b) Volume right of the focal point
Sensation of movement is to the left
IV
a) Seen from the left
b) Volume left of the focal point
a) Seen from the left
b) Volume right of the focal point
Sensation of movement is to the right

Also a static system conveys the sensation of movement -

Any static system (in nature) causes the sensation of movement in the differences in which its objects (in the diagram two cubes) present their various sides in relation to a point of reference.

to Diagram XVII :

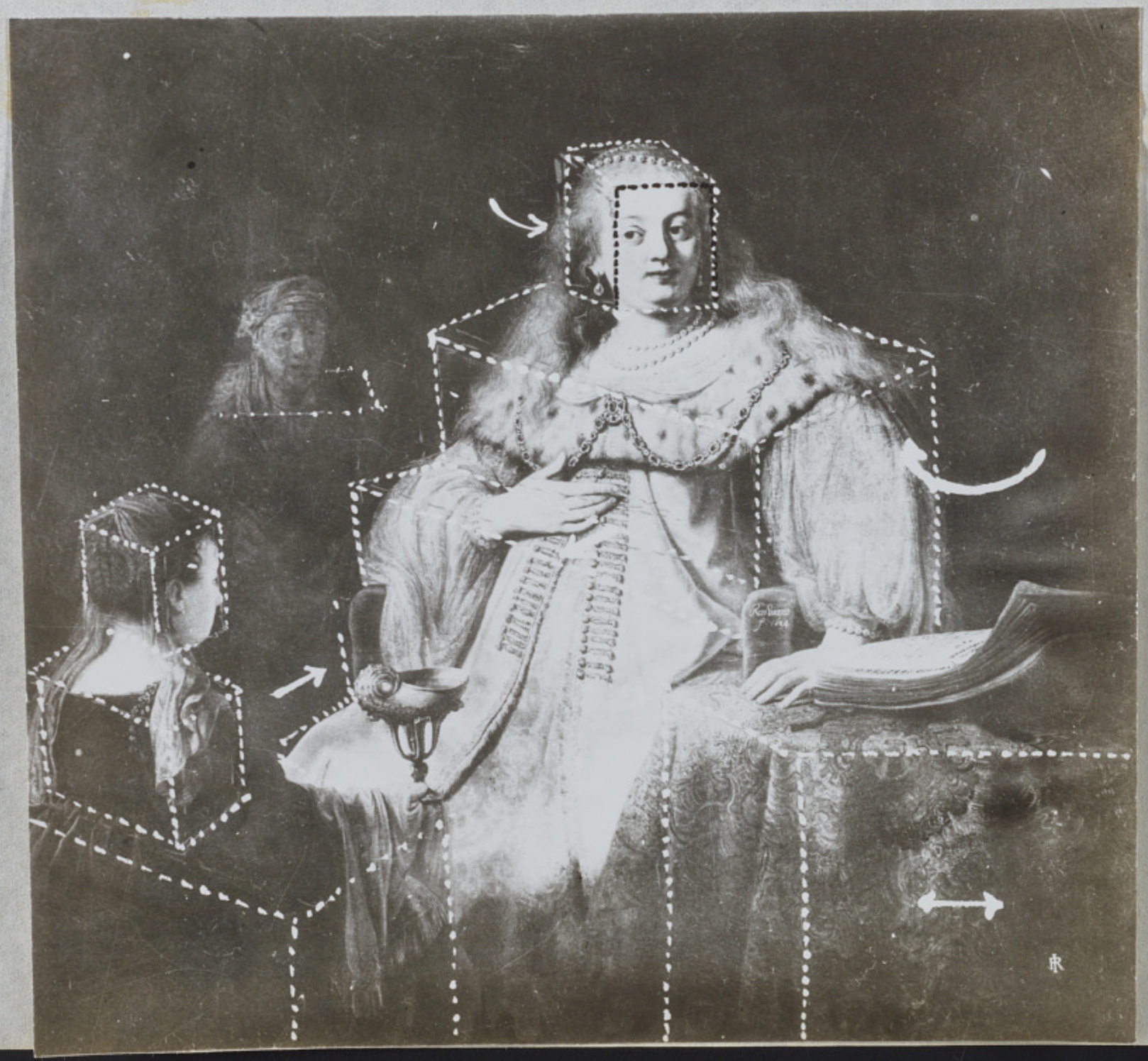
I	a) cube as such seen from left	a) cube as such seen from the right
	b) cube in its entity left from the point of reference	b) in its entity right from the point of reference
	creates movement-sensation from the front toward the back	
II	a) cube seen from right	a) cube seen from left
	b) left from point of reference	b) right from point of reference
	creates movement-sensation from back toward the front	
III	a) cube seen from left	a) cube seen from right
	b) left from the point of reference	b) right from the point of reference
	creates movement-sensation to the left ---	
IV	a) cube seen from left	a) cube seen from left
	b) left from the point of reference	b) right from the point of reference
	creates movement-sensation to the right	

Conclusion:

All nature is to the artist movement and rhythm.

See the following photographs of Rembrandt, Michelangelo and Jan Van Eyck.

ANATOMY IS ONLY IMPORTANT FROM THE STANDPOINT OF STATIC, DYNAMIC AND VOLUMINAR INTERPENETRATION.



N A T U R E -

II (b) -

NATURE IN "V I S U A L" EXPERIENCE

"In visual experience the objective world with its manifold movements, counter-movements and Rhythm is reflected back into a frontal relation to appearance."

Compare with page 51
page 62
and page

DUALISM OF TWO-DIMENSIONALITY AND THREE-DIMENSIONALITY

Reality and Appearance

The visual act is based on the duality of two-dimensionality and three-dimensionality.

Things are other than they appear.

Reality is three-dimensional.

Appearance is two-dimensional.

Therefore, the concepts "three-dimensionality" and "two-dimensionality" are identical with the concepts "reality" and "appearance."

We perceive reality through appearance, but appearance affects us as three-dimensional reality.

Spatial nature looks to us different than it really is, but we experience it as it really is.

We do not distinguish between reality and appearance but between appearance and effect.

To review:
Appearance is entirely different from the effective component derived from it.

Spatial nature is not two-dimensional, it only appears so; and the appearance is not three-dimensional, it only affects us as if it were.

Appearance is the product of the projection of three-dimensionality, synthesized to two-dimensionality.

PERCEPTION AND EMPATHY

Appearance

In perception we must experience the effects of the object viewed.

Something may be small, yet be large in its effect, and conversely, the actual thing may be large and yet appear small. The mountain in the background does not lose its large effect even though, in drawing, it may be smaller than ~~the mountain~~ a gardenfence in the foreground. The fraction of a millimeter in the dimensions of appearance may, under certain circumstances, make for infinity in its effect. Things release effects in their relationships to each other and to appearance that are not real, but in the realm of supersensory and transcendental nature. Visual experience therefore does not derive solely from the process of viewing an object, for if things are other than they seem yet appear to us as concrete projections of objects and of the world, then our sense capacity must be integrated through inner vision. This presupposes that we have a capacity for empathy beyond our mere sensory equipment.

Nature has wisely put limits to our senses, for only by sensory limitation can sense impression be grasped intellectually as experience.

Through capacity for empathy we integrate our sensory perceptions to innervision in order that we may see beyond mere sense experience to the eternal order and within it come to grasp things in the essence of their inner coherence. That which eludes our perception may sometimes be captured in experience. The physical eye sees only the veil of appearance; the inner eye penetrates to the essence of things by which we experience the world as a living entity.

THE VISUAL ACT

We do not see things, we see only the appearance of things...Appearance calls forth in us the projection of reality. We are born with eyes but at our birth we are entirely inexperienced. We must first learn to see. Sense of smell and taste are our first guides in life. These senses are developed by the hunger instinct, and sense of touch is being developed concurrently. Sense of sight begins to develop first from the experience of touching and hearing. The infant gropes for the object it sees until its grasp succeeds and thus a new space experience is gained by touch. Thus we learn to see. Sight, and with it, a sense of space is learned through the resistance of objects to being fully comprehended by touch. For the eye does not see in three dimensions. The eye only grasps the appearance, and the child must learn to interpret appearance with the help of other sense experiences. Sense of space is developed along with visual sense. Sense of space is of all the sense perceptions the one in which collective sense impressions are made experience. From experience, consciousness is developed. We learn to think. So our intellect develops as experience becomes connected with feelings for measurement.

Therefore the process of seeing is invariably accompanied by a feeling projection. Merely to look involves only the passive function of perception. But to see, perception must become experience through the active function of projection that connects the ego with the external world. In this way a psycho--spiritual picture of the world develops within us that becomes the pictorial basis for creation.

We see two-dimensionally, but we experience three-dimensionally. The visual act is based on experience itself; the act of experiencing on the effect of appearance on us. If reality did not conform to experience, then it would remain closed to our visual experience, even though we have eyes as visual organs. If our facility for sight were not two-dimensionally oriented, then we could not accept a picture, that is, a painted surface, as three-dimensional reality. Appearance is the optical form of reality and as such is only perceptible to sight and thereby to our feelings. We see in two-dimensions.

NATURE AS EXPERIENCE: II

Space -

Synthesis of visual experience -

Every objective experience is incomplete without the experience of space, which must be connected with objective experience if it is to invoke artistic meaning. Objective experience is only a part, and a subordinate part of the visual experience. And it is not the object that in the course of form-giving determines space as something accidental (an error of our artistic training), but it is the strict and complete realization of plastic totality which finally manifests the object plastically as the result of plastic development. This alone is plastic creation. The experience of 'the beauty of space' evades the great majority of people almost entirely. It is unbelievable how little the human being sees, by and large, how much of the beauty so generously proffered by nature passed him by. The development of visual experience is contingent on progressive schooling until it becomes a possession taken for granted, and second nature to the artist.

To review:
In nature the object shapes space. Space is inconceivable without the object - hence the object is of equal importance with the space and vice versa. Nature shapes space by means of the object. The configuration of space is indescribably beautiful and this beauty is as real as the beauty of the object. In plastic creation the object is realized simultaneously with the plastic realization of space. This reciprocity is observed infrequently or only negligently in the practice of creative art, and this oversight leads necessarily to incomplete creation. The paucity of creative accomplishment makes any attempt at literary communication unconvincing and ludicrous (from the first), for paucity of conceptual depth ends in sugar-coated pointlessness. The pictorial realization of objective content becomes scanty and miniature in representation. The human figure becomes a marionette. The tree is petrified in inexperience, lacking both tension and filled expansion. The whole thing ends in the helpless stammering of the dilettante or in the vacuous bravado of the virtuoso.

In the following reproduction, an imaginary plumb-line is introduced from top to the bottom. This line can be brought to any point of the picture's outline with similar effects. It shows that nothing is in the way of this line -- that the composition is two-dimensionally mastered -- that the rendered objects are integrated in the total volume of the picture -- that the totality of the picture is richly charged with lively tension which gives the picture its rhythmic expression. - It demonstrates further the variety in intensities of depth and negative space active on the object as well as on the environment of the object. The picture's inside is force-impelled.

NATURE -

In Visual experience:

"three-dimensional and two-dimensional" compensate each other--it leads to the experience of the multi-tensions of different intensities through which nature speaks to us as a living thing.

Portrait of Dora Maar 1943 Louis Carré Gallery

N A T U R E -

II (c)

NATURE IN "P L A S T I C" EXPERIENCE

TO LEARN TO SEE PLASTICALLY
ON THE BASIS OF PLASTIC FEELING.

"Plastic experience is given
by projection of depth relations
within totality of vision in the form
of "push and pull." -

Compare with page 44
page 62
and page

VISUAL EXPERIENCE...

Conclusion:

Objective experience is not enough for pictorial creation -

Visual experience is to be considered/objective the three-dimensional projection in the two dimensionality of vision.
It is still an incomplete experience to serve the purpose of pictorial creation...

Visual experience must be further plastically interpreted by 'Empathy' to serve a pictorial purpose.

'Plastic interpretation of vision' cannot be scientifically determined -- it is an act of feeling-into things by sensing the inherent qualities of things in the establishment of relations -

Visual experience for itself (that means without plastic interpretation) would perform only an imperfect act of pictorial creation. An artist who works on such a limited basis will never be the master of nature ...

It is also the main reason why the art of our time is so deeply grounded in its esthetical consciousness as a limitation which has not projected yet into a real new magnitude of great art in the fullest of its possibilities.

PLASTIC EXPERIENCE

In this chapter an attempt is made to demonstrate 'scientifically' the seeming discrepancy between visual and plastic experience. It will show that 'pictorial expansion and contraction' will only result from the counterplay in the relation of both of them. It is the prerequisite for Magnitude and Monumentality in pictorial creation.

The artist must become aware that he sees nature otherwise than he knows it, that to create nature how he knows it he must learn to see and to feel at the same time--combining seeing and feeling. He will become aware that nature is force impelled. That these forces speak to us in tensions.*

Tensions are forces - as well as depth expressions of varied intensity - which flatten out on the picture surface into two-dimensionality. The relation of them reveals and creates vital space in the form of

push and pull.

* See also Chapter: "The mind...what are tensions - "

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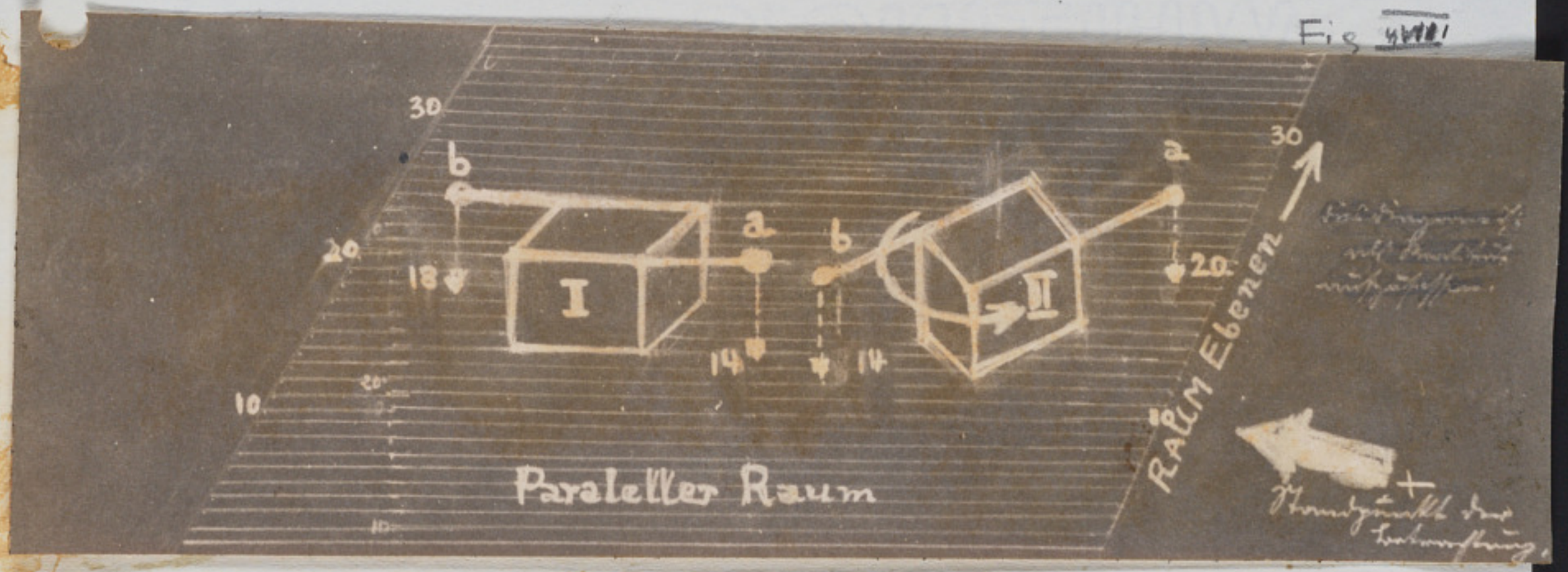
Fig 4 VIII.



point of observation

PLASTIC EXPERIENCE OF NATURE II -

To Figure XVIII.

Object and Space in depth experience -

Depth experience is conditioned by the movement of objects in relation to the movement of space -

In nature the object forms the space. In pictorial representation, space forms the object as a consequence of its development. The world of objects is animated space. Each object has its characteristic movement relative to other objects. An object has also its separate parts and these parts have characteristic movements relative to the main body of the object.

In the plastic interpretation of nature we distinguish three fundamental formal movements:

1. The movement of space relative to observation point. See foregoing chapter: in Diagram XVIII the observation point is to the right)
2. The movement of the object in space. This is always subordinate to the movement of space itself.
3. The movements of the various parts of the object. These are always subordinate to the movement of space and of the object in space.

Our sensation of depth is constantly influenced by these movements. Their effect on appearance leads to the plastic interpretation of appearance, and from this is developed the depth perception which we use as the basis of form. Our depth perception no longer agrees with our plastic knowledge of the object. For our depth sensation the forward point a on the cube II (Figure XVIII, p. 54, that moves from left to right) is farther back in space than point b which lies opposite from it and is perceived to be forward when interpretated according to appearance. Points a and b on cube I, however, undergo no such changes in plastic interpretation of their objective position because cube I is parallel to the spatial movement.

The diagram presents the space as parallel to the axis of the eyes of the observer. We see cube I from the left, cube II from the right, the space being to the left of the observation point.
The working out of the relationships 'object,' 'space' and 'appearance' in forming our depth-perception calls forth in us sensations of movement. As against cube I, cube II is moving from left to right in space. Our observation shows us that factual knowledge of things is not necessarily the same as depth perception. This often confused the layman and the beginner since both are unsure in their feeling. Depth sensitivity derives not only from the relationships of things but from all relationships of movement in which space is presented to experience as a living entity.

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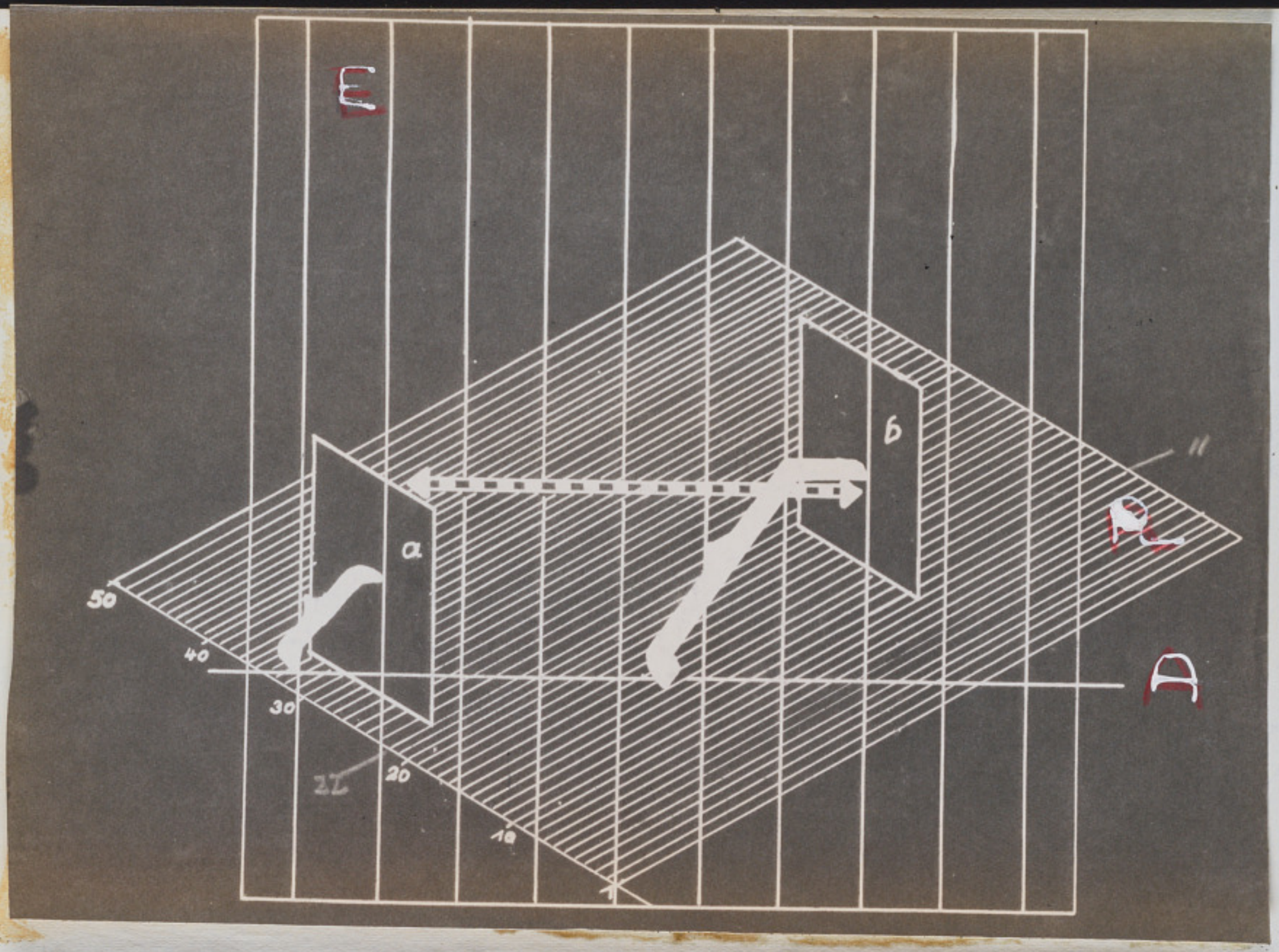


Fig. 14

THE EFFECT OF SPATIAL MOVEMENT ON DEPTH PERCEPTION -

To Figure ~~XVIII~~ XIX -

How movement of space (considered in relation to an observation point) affects our depth experience:

Planes act within spatial relationships in the same way as do points.

In Figure 6, E is considered to be a transparent surface. The surface itself represents appearance. R is the actual space that moves diagonally to eye-axis A, left from the observation point.

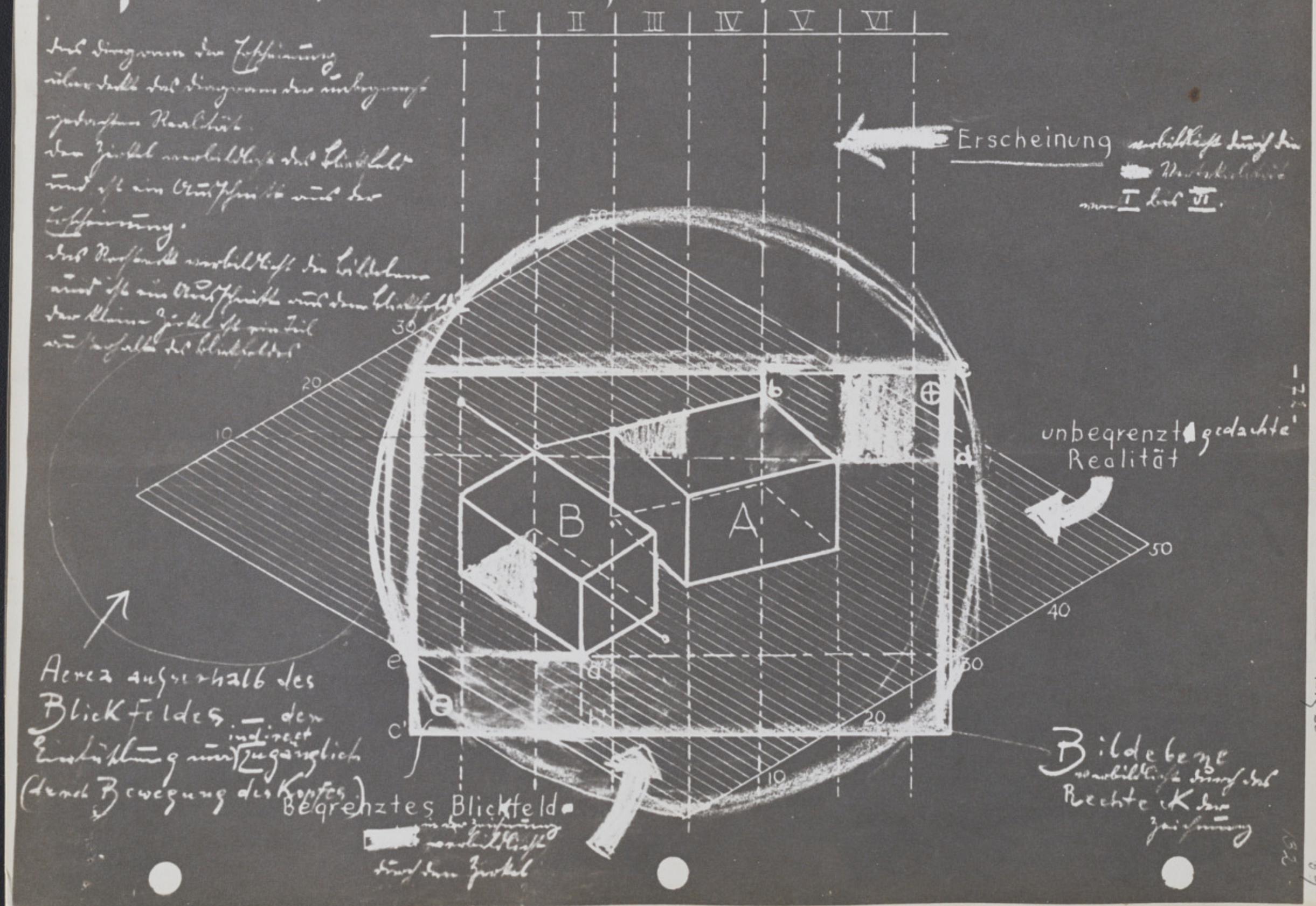
Through the effect of spatial movement on appearance the plane that in actual space is further in depth, appears nearer. The converse is also true, the forward surface being sensed as the more distant one.

The effect of spatial movement on appearance produces furthermore a sensation of tension represented by the white arrows of the diagram. The more forward surface (in terms of actual space) produces the greater depth impression. By sensitivity to tension, empty space in its effect on subjective sensibility becomes a real form. That which is senses as standing deeper in the depth produces a more voluminous forward-swinging force. That which is experienced in space relatively near has only relatively minor forward-swinging force and therewith minor spatial saturation in comparison to experience. Spatial saturation represents the negative space. If the reality of objects were not extended by our sensitivity to tensions expressed by spatial saturation, then our reaction to the harmony of space would be disturbed. In representation, the result would be that the left side overweights the right. Therefore the absent volumes of the negative space must maintain the balance against the objects that are positive volumes in order to achieve a harmonization.

Das Tiefenproblem:

„Unbegrenzte Realität und ihre Projection in die Erscheinung, das der Erscheinung entnommene begrenzte Blickfeld, die Bildebene. ↓

die Appearanz des Blickfeldes bekommt identisch mit der Bildebene



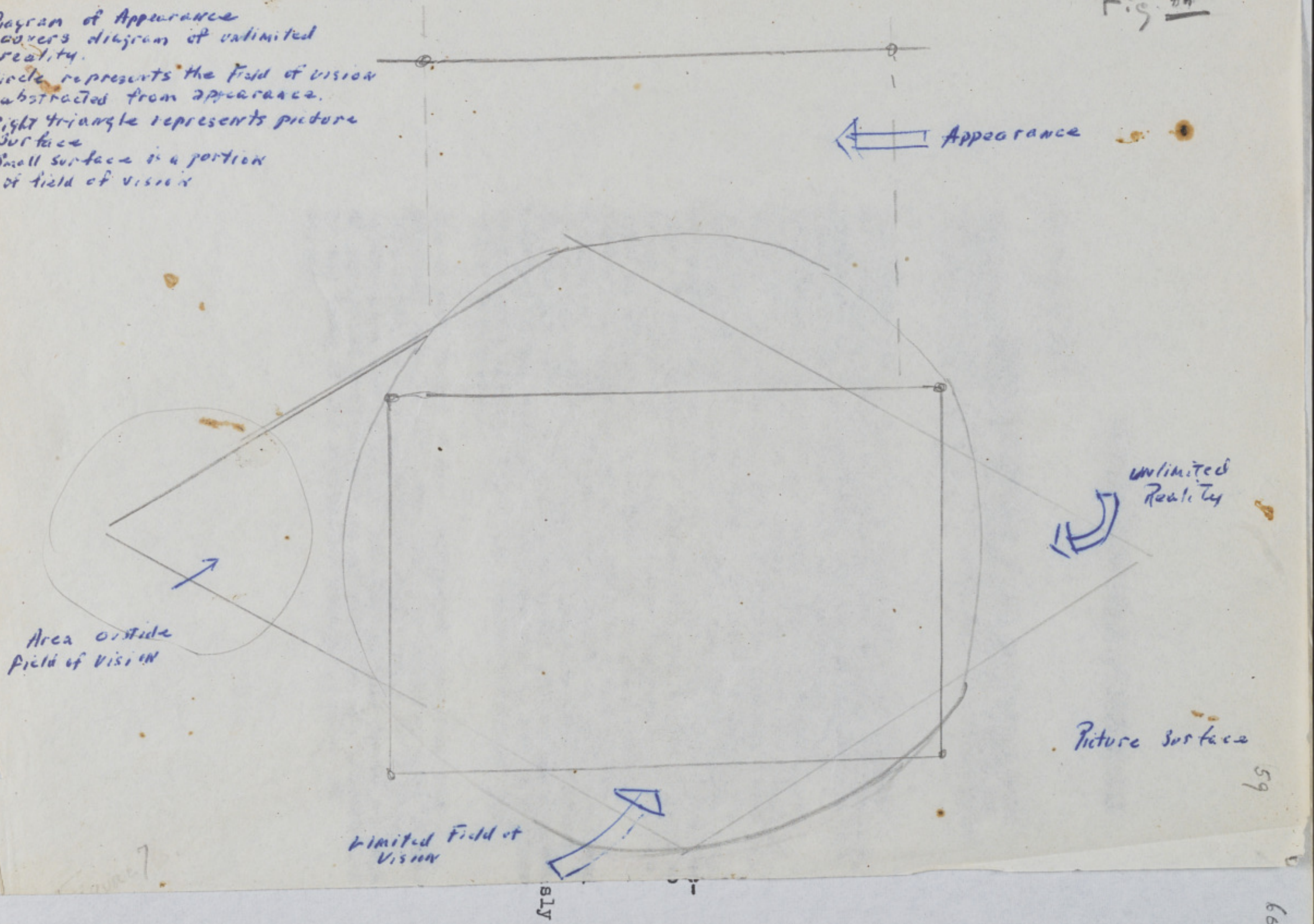
das Diagramm der Erscheinung überdeckt das Diagramm der unbegrenzt gedachten Realität.
der Zirkel verbildlicht das Blickfeld und ist ein Ausschnitt aus der Erscheinung.
das Rechteck verbildlicht die Bildebene und ist ein Ausschnitt aus dem Blickfeld
der kleine Zirkel ist ein Teil außerhalb des Blickfeldes

Fig 20

Unlimited Reality and its Projection in Appearance, the limited Field of Vision abstracted from ... the Picture Surface

Fig 44

Diagram of Appearance
covers diagram of unlimited reality.
Circle represents the field of vision abstracted from appearance.
Right triangle represents picture surface
Small surface is a portion of field of vision



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PLASTIC EXPERIENCE OF NATURE III

To Figure XX -

UNLIMITED REALITY in its projection into APPEARANCE: from it the limited FIELD OF VISION is abstracted and becomes the basis for the development of a pictorial concept -

The large right angle I-VI represents the diagram of appearance which overwhelms the diagram of reality, conceived of as unlimited. The circle represents the limited field of vision and is abstracted from appearance - the smaller right angle represents the pictorial surface and is abstracted from the field of vision. The limited field of vision becomes identical with the pictorial surface. The small circle is a part beyond the field of vision, and would become only perceptible by movement of the head away from the direction of contemplation. Plane-portions b,b',c,c' seem to swing forward out of depth; plane fragments a',b',c',c' seem to press into the depth and maintains two-dimensional balance against the plane fractions a,b,c,d,e. Thus the most heterogeneous parts involved in the form-giving act can be simultaneously unified in the picture. The form-giving act can be simultaneously unified in the picture. The form-giving act is further conditioned by the subjective comprehension of the visual experience.

The objective and visual perception goes from the physical recognition over into the artistic experience. This rests on the subjective sensitivity to penetrate nature as a living thing; and beyond this in an attempt of pictorial realization on sensibility and penetration of the laws of the expressive medium in which we create.

Push and Pull

Push and Pull are a visual phenomena that results from the counterplay and mutual relation of the two- and threedimensional in visual experience.

The Threedimensional concernes nature—
as we know Reality by physical orientation—

The twodimensional concernes the optical limitation of the eye.—
we see only appearance

Visual experience is compensation attained through relation of both—the two- and threedimensional with Push and Pull gained (from it) as the dominating element of the entier visual experience.

PLASTIC CREATION -

Conclusion -

Visual experience defines plastic experience as the experience of depth in a two-dimensional sense:

formal as well as in relation to color. Depth contains 'echo' and within 'depth echo' are harmonizing forces that are released and activated by our plastic sensitivity. In a physical sense this is the retro-active retort of depth to appearance - in a psychological sense it is the reaction of subjective sensitivity to the stimulus of the visual experience.

Visual experience is not primarily a matter of fixation or determining of actual physical depth; it is first and foremost a play of forces within the depth, in the sense of push and pull, by which the mutual relationships in variable intensities affect us subjectively.

This experience of the play of forces in the depth is first subjected to the common denominator of personal reaction in the temperament of the artist. Only then can the depth fixation be realized plastically on the picture plane by submitting the subjective impression to the laws of the picture plane.

This brings us to the inherent Laws of the picture plane.

III

T H E P I C T U R E - P L A N E --

THE PICTURE PLANE ANSWERS
WITH HIGHEST PRECISION
TO THE
PLASTIC A N I M A T I O N OF

P U S H AND P U LL

Picture surface

It is still not yet generally recognized that the picture surface answers the animation of a plastic impulse automatically with a plastic counter-impulse. That means, the automatic reaction of the picture surface of pictorial animation is dominated by inherent laws which respond plastically with highest precision to such animation.

Push and Pull

It is for this reason possible to generate forces on such a surface which respond to each other not only with greatest exactitude in the sense of push and pull, but furthermore and with the same exactitude in the sense of intensity and speed with which to vary depth penetration, as well as its answering counter-echo. Only from the varied counterplay of PUSH and PULL and from its variation in intensities plastic creation will result.

Let us repeat that the object is a space-creator. Considered as such, it is a source of highest inspiration for plastic creation. But to be of use for pictorial animation, the object, or, in short, the model must be broken down into spatial fragments. These fragments must be further considered in their function not only in relation to the object, but predominantly in relation to the spatial totality in the frame of which the object is only a subordinated part. It is therefore not a consciousness of the synthesis of the object that should primarily dominate the creation, but a consciousness of the synthesis of the spatial totality should consider the object as an integrated part of it. It is out of the pictorial realization of spatial totality that the image of the object should finally "emerge." It should be theconfirmation as the 'finale'-of the - creation.

In breaking down the spatial totality into spatial fragments this fragmentation assimilates itself with the pictorial means: points and lines and planes, etc., to serve pictorial necessities in the creation of pure plastic form which is given only through identity of form and content. Spatial synthesis is given a priori in the picture surface--its synthesis should never be broken throughout

Rhythm

the whole pictorial development, but its synthesis can be transformed by subdivision into the infinite. The beauty of space is finally presented in the rhythmic relation of all parts involved within the meaning of its pictorial functions. - It is only through step by step development that the transfiguration of plastic experience into the plastic realisation on the picture surface takes hold. Simplification of spatial totality under consideration of the Essential and Elimination of the Unessential--

Abstraction

an art in itself--leads to abstraction. Objective consideration must be subordinated.

SUPERSENSITORY EFFECTS:

The Picture-plane -

its nature -

In creation, the picture plane is 'plastically' enlivened by mental forces, By its nature, the picture plane with its underlying conformity to its own laws, reacts with plastic exactitude to idealogical stimulus. We are dealing with forces that appear automatically and spontaneously upon stimulus, with the immediate result of the plastic realization of an idea. This has been released by the stimulus. By nature this phenomenon is self-contained within the picture plane. The picture plane reacts with 'push' and 'pull' to the stimulus received. Push and Pull are expanding and contracting forces. Push and Pull presuppose physical support in visual motion. The physical supports are elements of form. Planes are the most important supports, lines and points less so.

The forces of push and pull function three-dimensionally, but they present themselves pictorially two-dimensionally and thereby join themselves to the other forces that function, of and by themselves, only two-dimensionally. The movement of a support on a flat picture plane is only possible by a shifting from left to right or up and down. To understand the inner workings of push and pull, it must be recognized that, by nature, the picture plane automatically reacts in the opposite direction to the stimulus received. Form can, in this way, be developed in proportion to the stimulus received.

Push responds with Pull, and Pull with Push. An example may clarify this.

The internal pressure in a balloon is the same on all sides. If you press one side of the balloon the inner balance is distorted and the balloon swells out on the other side in proportion to the pressure applied. It is superfluous to say that the reverse process holds true. Exactly the same thing happens, idealogically, with the picture plane. If somewhere in the picture a push-force is

released, the picture plane responds automatically with a pull force and vice-versa. Push and Pull are retaliative forces that produce the spatial equivalent in reverse direction of the application of force, with the resulting restoration of two-dimensional balance. Two-dimensional motion, on the one hand, and depth rhythm on the other achieve their own resolution.

The function of Push and Pull in respect to form discloses the secret of Michelangelo's monumentality and Rembrandt's universality. At the end of his life and at the height of his capacity, Cezanne understood Push and Pull as color's greatest indwelling secret.

Every pictorial representation presupposes an expressive medium, on which the picture is made. This is the picture plane. We form upon the picture plane with color. This is the expressive means in which the picture is made. Both these expressive means follow their own laws by which they mutually delimit and expand. The nature of the picture plane is two-dimensional. The nature of appearance is likewise two-dimensional. Appearance and picture plane are therein similar. This is of basic meaning for the creative process. We have ascertained that nature appears optically to us as two-dimensional and that we do not see objects in themselves but their appearance. However, with the aid of our spatial sense, we interpret appearance as three-dimensional reality. Our spatial sense is based on our projective capacity and this on our vision. Vision and projection lead to the optical experience. In the same way the nature of the picture plane is available to us only through projection. We interpret the properties of the picture plane by means of our capacity for projection. This, however, presupposes that we know the nature of the picture plane. We can only create perfectly in an expressive medium when we encompass its nature intellectually. Intellectual control of the expressive medium is the prerequisite for form. So the picture plane has its own laws which are basic to the form process. The visual experience can be brought to expression on the two-dimensional picture

plane only by two-dimensional means. The experience of depth always includes the experience of movement. What we experience in nature as depth is transformed on the picture plane to movement. This is one of the most important plastic insights. Depth can only be expressed by the shifting of planes. The planes shift against one another from right to left and vice-versa and up and down, or the reverse. All movements are spatial in their nature. In nature a movement can progress two-dimensionally or three-dimensionally. The picture plane is capable of ø only two-dimensional movements. Three-dimensional movements in space - that is, all depth processes - can be expressed only as two-dimensional on the picture plane. Not real depth but only the illusion of depth can be presented on the picture plane. In the same way, not real movement but the spiritual illusion of movement can be brought to pictorial expression. The potentialities for movement are extraordinarily limited on the picture plane. For example, a line may move pictorially only from left to right, up and down, straight or crooked, as a circle or an ellipse, or diagonally, and yet, notwithstanding, the limitless quality of form is based on this extraordinary limitation.

Fig XXXI

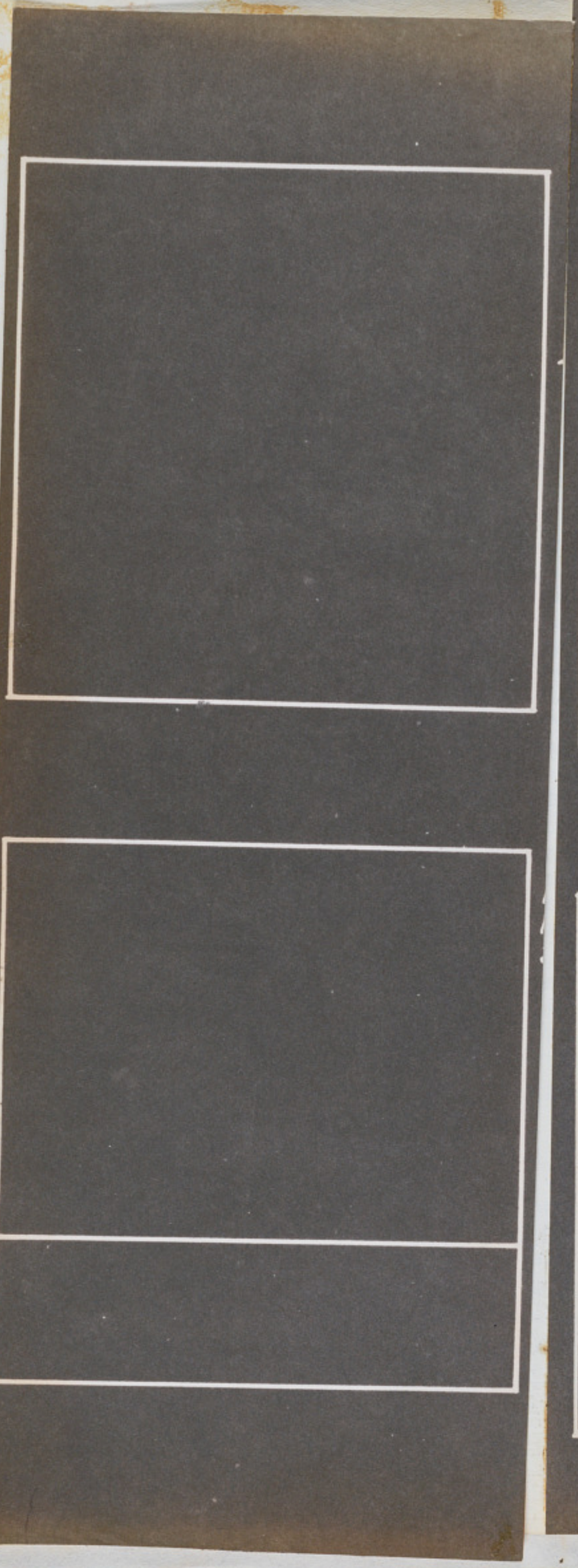
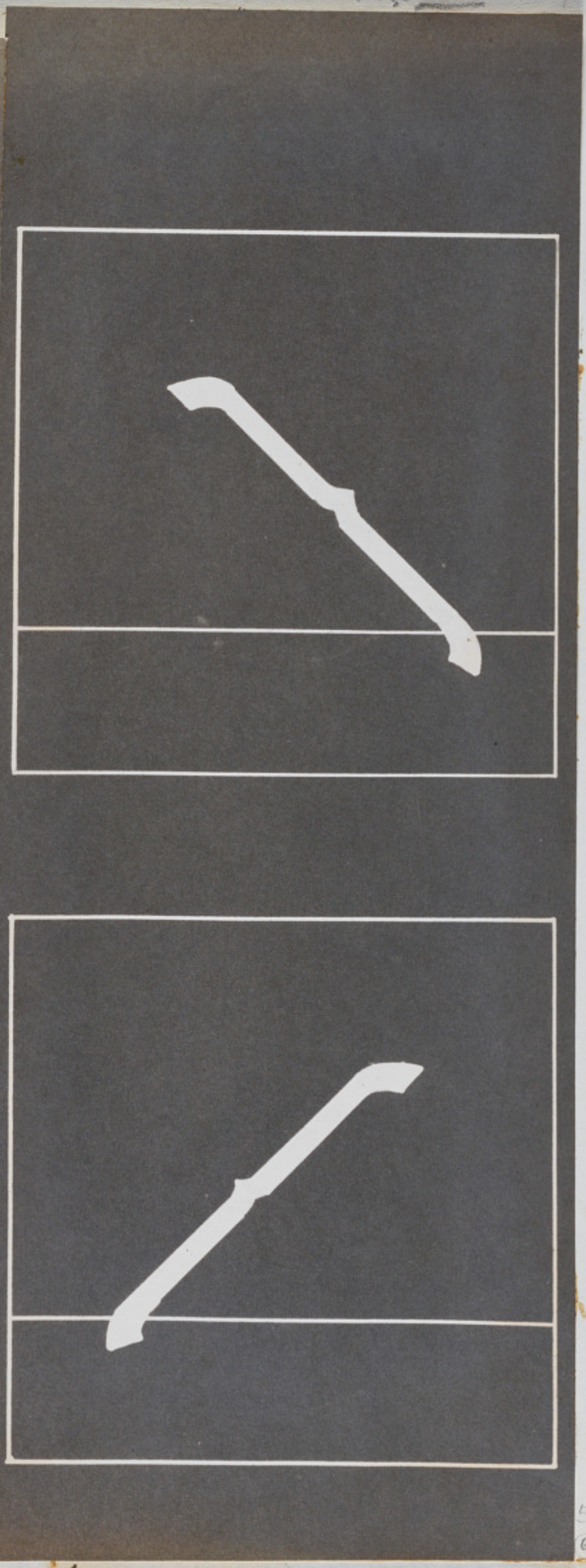


Fig. XXXII



To Figure XXI and XXII:

The nature of the picture plane -

Composition in its total development is determined by the format on which it is composed. In other words: the given outlines of the format determine the composition from the beginning on. They are not only the first lines of the composition - they pictorialize from the beginning and through all stages of development of the composition its completion, in a technical as well as in a spiritual sense. Every act of form on the picture plane is in reality an act of division of the picture plane. Composition means to divide the picture plane in conformity with an experience. The act of division of the picture plane is the basis for the enlivenment of form. The nature of the picture plane is instantly affected by the act of division, for every division produces an inevitable spatial effect. By the process of breaking up the picture plane arises the wonder of spatial illusion.

Figure I shows the picture plane in its untouched state: 1,2,3,4 are the outlines of the format. The untouched picture plane is two-dimensionally perfect in balance. In this state it evokes the impression not only of being flat, but furthermore of representing a suggestion of 100% volume. The volume is in its suggestion absolutely closed.

If we draw a line on the picture plane from left to right to the other border as in Figure II, we have split the picture plane. By the act of division we have:

1) evoked a spatial effect and have thereby simultaneously

2) undertaken a division of forces on the picture plane.

But we have by no means disturbed the state of balance of the picture plane. We have undertaken pictorially an uneven division of forces, which however has found an immediate spatial equivalent that has put in, in appearance, with the effect of establishing pictorial balance. This principle rules the total formative process on the picture plane.

In the formative process it is always a question of the maintenance of the two-dimensional unity of the picture plane, particularly in regard to the state of balance thereby expressed.

Figure III - The spatial effects become evident by means of the brackets.

Figure IV - By the linear act of division of the picture plane as repeated in Figures III and IV we have a spatial impression; this, however, can be variously interpreted by the mind. This division does not yet represent a strict system of relation that, in its directness, forces the mind to one clear impression. It may be interpreted by the mind as parallel, or as seen from left and right.

The picture plane is through the formative process continuously activated. Thereby the concept of unity basic to form, as we have seen, identifies itself immediately with the picture format and its outlines. Every further division drawn respective the pictorial format produces space. The nature of the picture plane is awakened by the divisional process, but its two-dimensionality is not disturbed. We have learned that appearance, identical in its nature with the nature of the picture plane, represents in its expression a perfect consolidation of three-dimensionality. The sum of this three-dimensional consolidation is two-dimensionality.
Therefore we can form three-dimensionally on the picture plane without disturbing its two-dimensionality. The pre-condition for it is the concept of space fulfillment and thereby of space unity basic to form. Spatial unity is the sum of the total spatial consolidation. Spatial fulfillment is the return projection of depth experience into appearance.
Without consideration of this pre-condition our concept of spatial unity is incomplete and incompatible with the nature of the picture plane. But if an experience is basic to the act of division, determining the division, then the experience is realized in the effects loosed by the manner of the division. The picture plane thereby undergoes an enlivenment in the sense of the experience.

Therewith we can enliven the picture plane in the sense of the impulses received from nature. The sum of all impulses determines the act of division and the manner of division by which we develop pictorially our experiences and projection, in pictorial creation. In this manner not the object determines space, but space the object (by integration) in the process of its own realization. We can then create three-dimensionally on the picture plane without disturbing its nature. The picture plane is a surface and a surface it must remain.

The phenomena of overlapping:

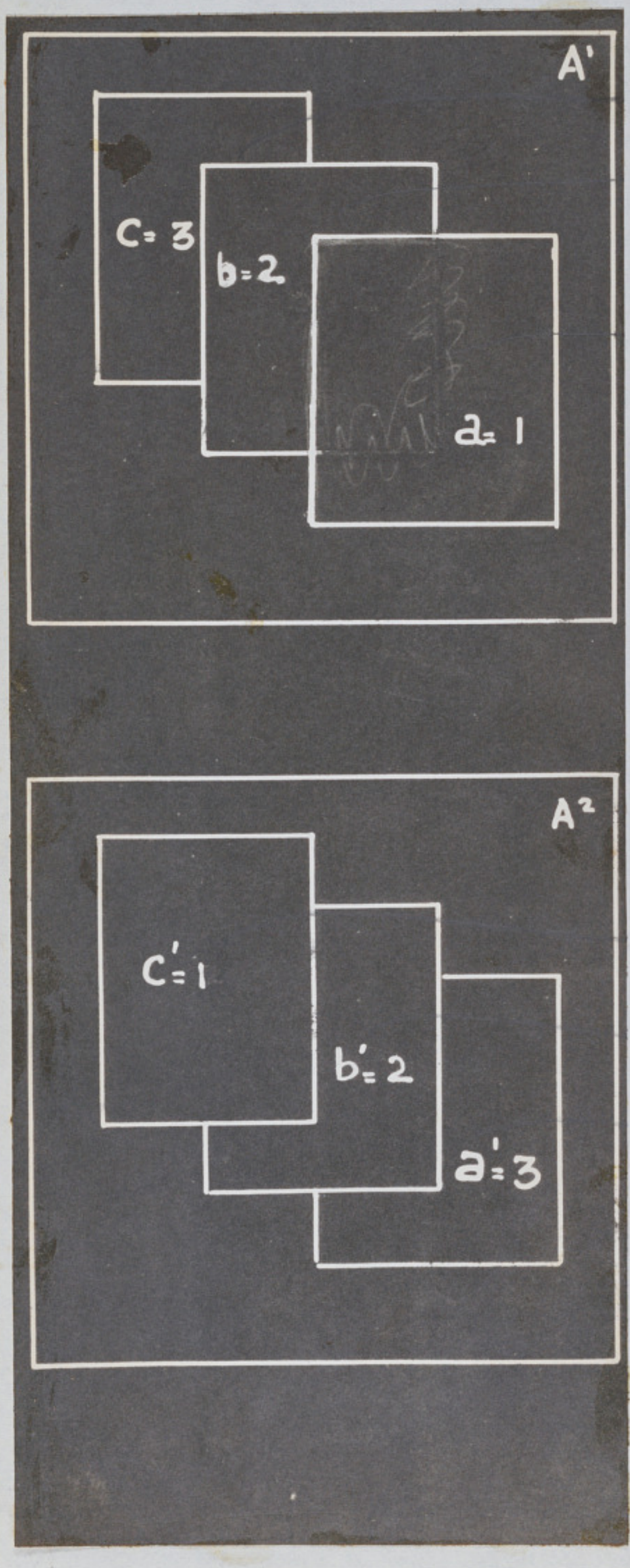


Fig. 4 & III

Fig. 4 & IV

Notice that the overlapping planes stay on the paper on the same place in both Figures - -

SUPERSENSITORY REALITIES -

To Figure XXIII and XXIV:

The picture plane--
the phenomena of overlapping -

Figure I represents A-1, a picture plane on which three surfaces a,b,c, are drawn. The surfaces have the following spatial position:

Surface a is the first surface in space.
Surface b is the second surface in space.
Surface c is the third surface in space.

Figure II shows the same placement. Surfaces a-1, b-1, c-1 are in exactly the same place on the picture plane as in A-1. By a simple change in overlapping an entirely different spatial arrangement has occurred:

Surface a-1 now is third surface in space
Surface b-1 now is second surface in space
Surface c-1 now is first surface in space

The effect, caused by the arrangement of overlapping is astounding. The altered overlapping has not only changed entirely the spatial order; the opposition of both figures shows besides a complete alteration of the movement in depth. In Figure I the surfaces move in the depth as if seen from above; in FigureII as if seen from below. The directional movements have reversed themselves completely in relation to depth. If, however, we study each figure separately we can interpret the movement in depth in each figure in both directions - either into the depth or striving forward out of the depth. Both figures together represent a system of relationships. Taken alone the figures have no strict (that is, no clear) mental fixation, and their effect in movement is therefore relative. Only by a system of relationships does the mental response become absolute. Both systems (seen together) show opposed--but responding spatial contra-Rhythm.

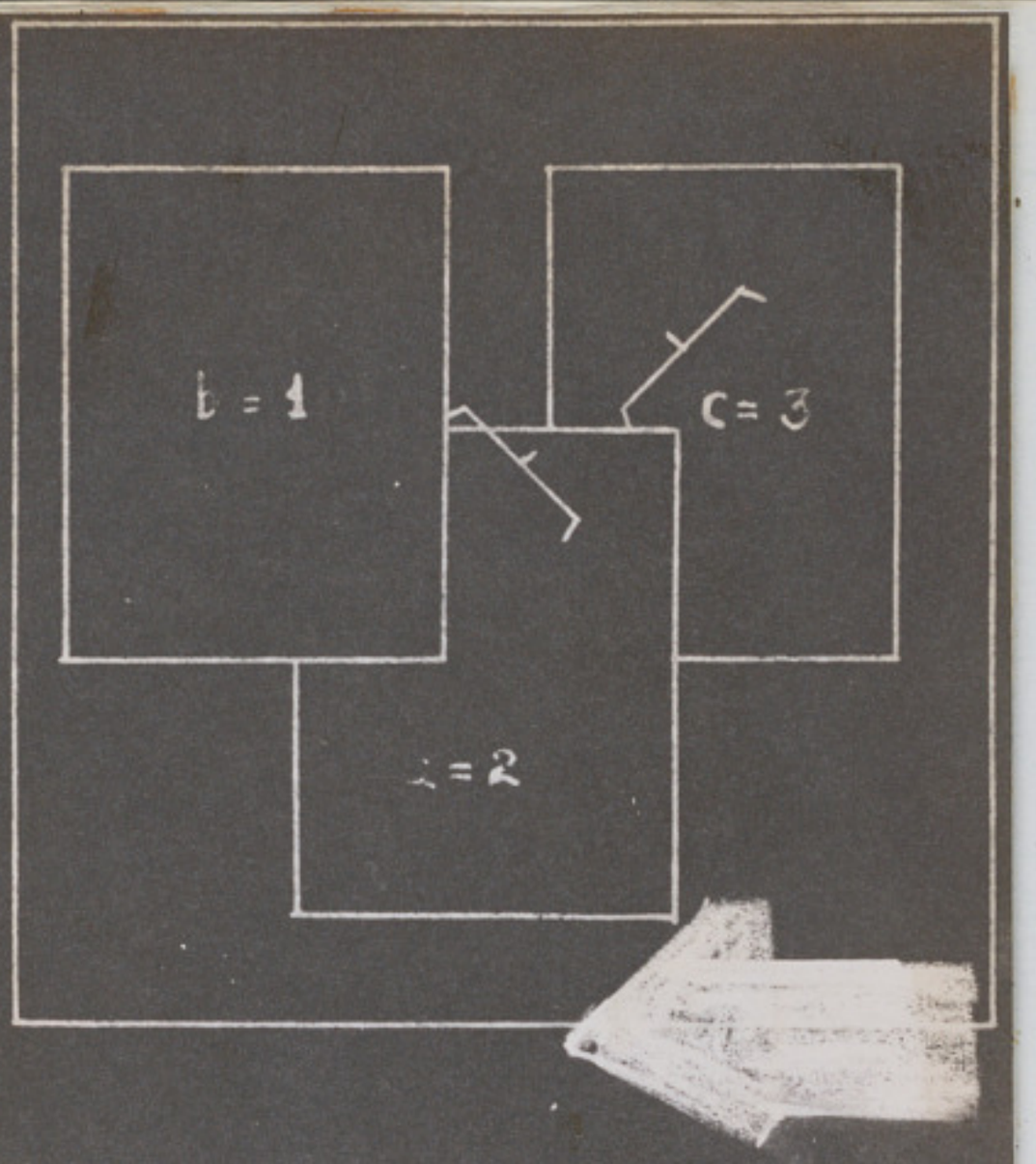


Fig. ~~XIV~~ V

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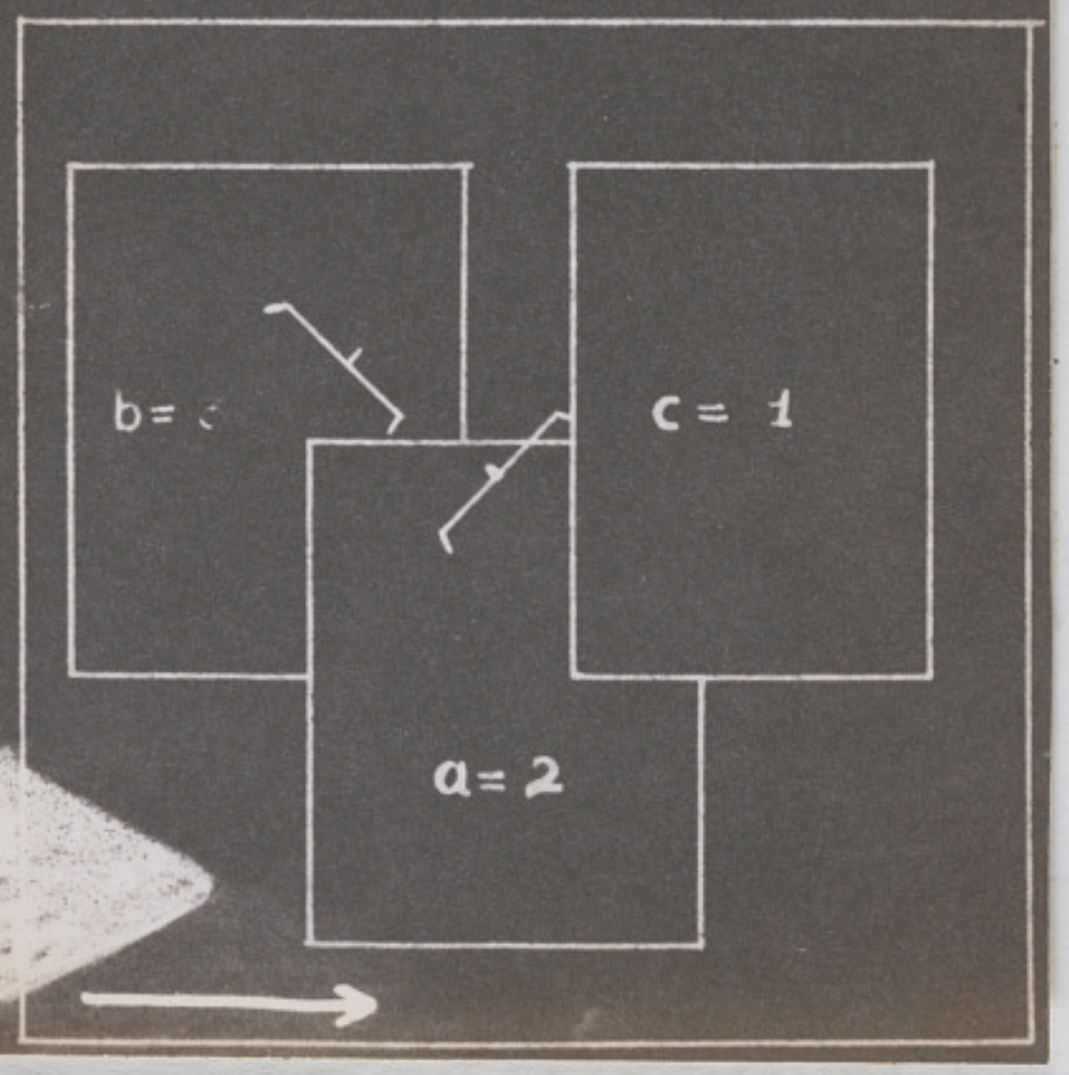

Fig ~~XV~~ VI

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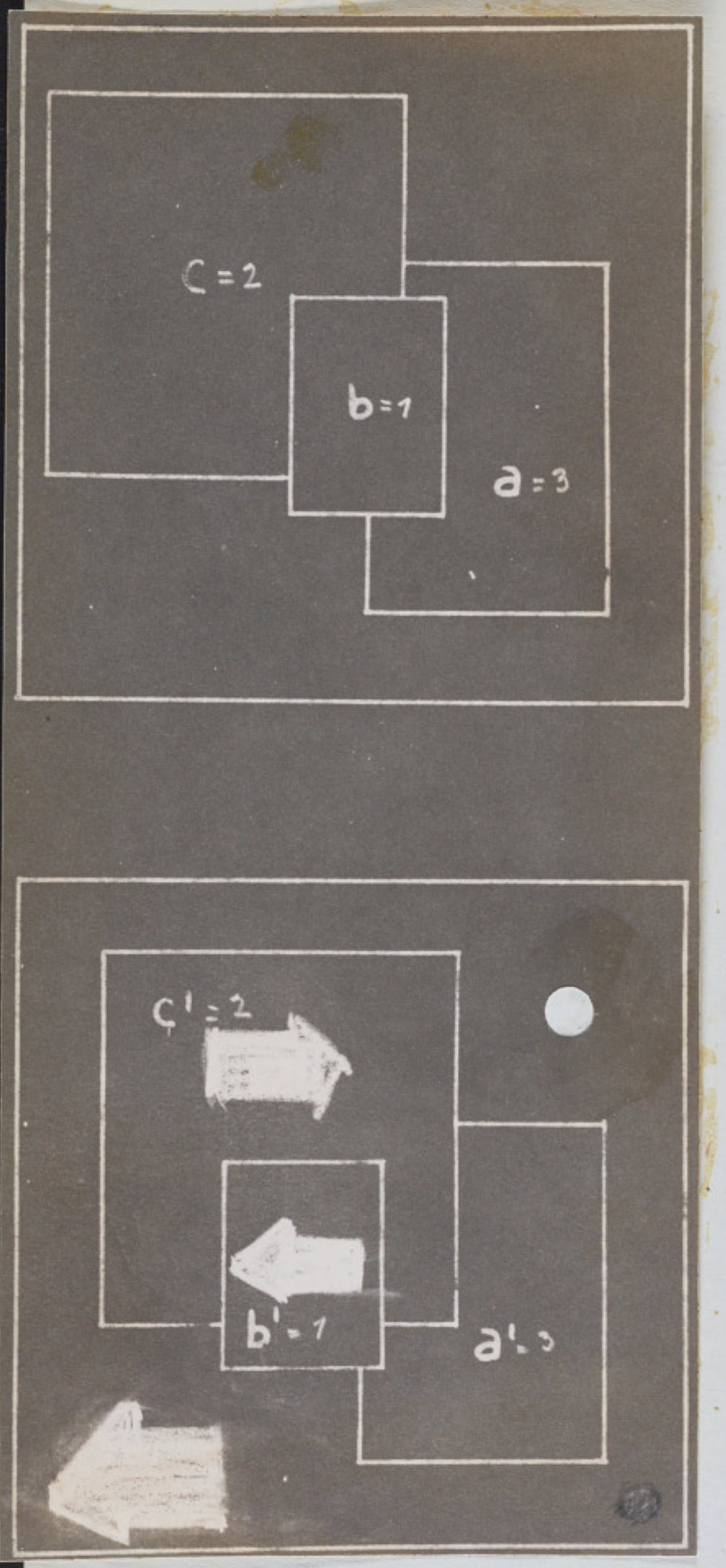
SUPERSENSITORY REALITIES -

To Figure XXV and XXVI:

The Picture plane -
movement initiated by overlappings -

In Figures XXV and XXVI, surfaces a,b,c are arranged alike on the picture plane. By the arrangement of the overlapping, a surprising phenomenon of movement occurs. We see the same change in spatial order and of movement in relation to the depth as in Figures XXIII and XXIV. We see further that the observation point has changed completely. In Figure XXV it is right; in Figure XXV left. The middle planes a (in both Figures) lose entirely the significance of their middle position in relation to the picture plane. Figure XXV shows a definite shift in movement of surfaces a,b,c to the picture plane toward the left; in contrast to Figure XXVI on which planes a,b,c show a definite shift in movement to the picture plane toward the right.



Animation --

relativ static

Fig. ~~88~~ VII

animationspoint —

with the help of an animationspoint
the planar system expresses itself
more dynamic

Fig. ~~88~~ VIII